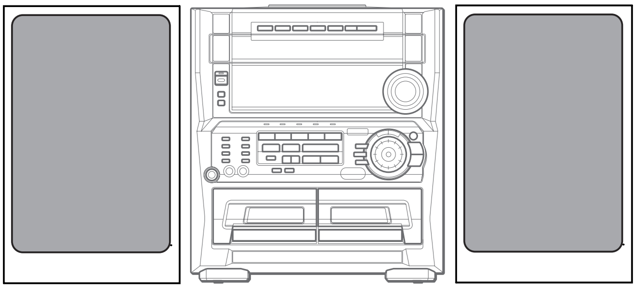
Z-L700 U
Z-L800 LH



SERVICE MANUAL

COMPACT DISC STEREO
CASSETTE RECEIVER

BASIC TAPE MECHANISM : 2ZM-3MK2 PR5NM
BASIC CD MECHANISM : 6ZG-1 ZRDM

SYSTEM	CD CASSEIVER	SPEAKER	STEREO TURNTABLE	REMOTE CONTROLLER
Z-L700	CX-ZL700	SX-WZL700	PX-E860	RC-ZAS12
Z-L800	CX-ZL800	SX-WZL800	-	

- If requiring information about the CD mechanism, see Service Manual of 6ZG-1, (S/M Code No. 09-001-338-7N2).

aiwa

S/M Code No. 09-004-422-7R1

SPECIFICATIONS

<FM tuner section>

Tuning range	87.5 MHz to 108 MHz
Usable sensitivity (IHF)	13.2 dBf
Antenna terminals	75 ohms (unbalanced)

<AM tuner section>

Tuning range	530 kHz to 1710 kHz (10 kHz step) 531 kHz to 1602 kHz (9 kHz step)
Usable sensitivity	350 µV/m
Antenna	Loop antenna

<Amplifier section>

Mid-high frequency amplifier	
Power output	U : 40 W + 40 W (200 Hz to 20 kHz, T.H.D. less than 1 %, 8 ohms) LH : Rated 37 W + 37 W (1 kHz, T.H.D. 1 %, 8 ohms) Reference : 45 W + 45 W (8 ohms, T.H.D. 10 %, 1 kHz)
Total harmonic distortion	U : 0.15 % (15 W, 1 kHz, 8 ohms)
Low frequency amplifier	
Power output	U : 120 W + 120 W (50 Hz to 200 Hz, T.H.D. less than 1 %, 6 ohms) LH : Rated 110 W + 110 W (75 Hz, T.H.D. 1 %, 6 ohms) Reference : 135 W + 135 W (6 ohms, T.H.D. 10 %, 75 Hz)
Total harmonic distortion	U : 0.15 % (60 W, 75 Hz, 6 ohms) LH : 0.15 % (45 W, 75 Hz, 6 ohms)
Inputs	VIDEO / AUX: 310 mV (adjustable) PHONO : 400 mV (47 kohms) MIC 1,MIC 2 : 1.4 mV (20 kohms)
Outputs	CD DIGITAL OUT (OPTICAL) SPEAKERS HIGH FREQ : accept speakers of 8 ohms or more SPEAKERS LOW FREQ : accept speakers of 6 ohms or more SURROUND SPEAKERS : accept speakers of 8 – 16 ohms or more PHONES (stereo jack): accepts headphones of 32 ohms or more

<Compact disc player section>

Laser	Semiconductor laser (λ = 780 nm)
D-A converter	1 bit dual
Signal-to-noise ratio	85 dB (1 kHz, 0 dB)
Harmonic distortion	0.05 % (1 kHz, 0 dB)
Wow and flutter	Unmeasurable

<Cassette deck section>

Track format	4 tracks, 2 channels stereo
Frequency response	CrO_2 tape : 50 Hz – 16000 Hz Normal tape : 50 Hz – 15000 Hz
Signal-to-noise ratio	50 dB (CrO_2 tape peak level, above 400 Hz)
Recording system	AC bias
Heads	Deck 1 : Playback head x 1 Deck 2 : Recording / Playback / erase head x 1

<Speaker system SX–WZL700 (U)>

Cabinet type	3 way, built-in subwoofer
Speakers	Subwoofer : 200 mm ($7^{7}/_{8}$ in.) cone type Full range : 120 mm ($4^{3}/_{4}$ in.) cone type Super tweeter: 60 mm ($2^{3}/_{8}$ in.) ceramic type
Impedance	6 ohms / 8 ohms
Output sound pressure level	88 dB/W/m
Dimensions (W x H x D)	260 x 495 x 355 mm ($10^{1}/_{4}$ x $19^{1}/_{2}$ x 14 in.)
Weight	8.5 kg (18 lbs 12 oz.)

<Speaker system SX–WZL800 (LH)>

Cabinet type	3 way, built-in subwoofer
Speakers	Subwoofer : 200 mm ($7^{7}/_{8}$ in.) cone type Full range : 120 mm ($4^{3}/_{4}$ in.) cone type Super tweeter: 60 mm ($2^{3}/_{8}$ in.) cone type
Impedance	6 ohms / 8 ohms
Output sound pressure level	88 dB/W/m
Dimensions (W x H x D)	260 x 495 x 355 mm ($10^{1}/_{4}$ x $19^{1}/_{2}$ x 14 in.)
Weight	8.5 kg (18 lbs 12 oz.)

<General>

Power requirements	U : 120 V AC, 60 Hz LH : 120 V / 220 – 230 V / 240 V AC, (switchable), 50 / 60 Hz
Power consumption	U : 210 W LH : 240 W
Power consumption in standby mode (LH)	With power-economizing mode off : 45 W With power-economizing mode on : 0.9 W
Dimensions of main unit (W x H x D)	360 x 395.3 x 402.3 mm ($14^{1}/_{4}$ x $15^{5}/_{8}$ x $15^{7}/_{8}$ in.)
Weight of main unit	U : 12.5 kg (27 lbs 9 oz.) LH : 12.4 kg

- Design and specifications are subject to change without notice.

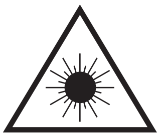
- The word "BBE"and the "BBE symbol" are trademarks of BBE Sound, Inc.
  Under license from BBE Sound,Inc.

PROTECTION OF EYES FROM LASER BEAM DURING SERVICING

This set employs laser. Therefore, be sure to follow carefully the instructions below when servicing.

WARNING!!

WHEN SERVICING, DO NOT APPROACH THE LASER EXIT WITH THE EYE TOO CLOSELY. IN CASE IT IS NECESSARY TO CONFIRM LASER BEAM EMISSION. BE SURE TO OBSERVE FROM A DISTANCE OF MORE THAN 30cm FROM THE SURFACE OF THE OBJECTIVE LENS ON THE OPTICAL PICK-UP BLOCK.



- ■ Caution: Invisible laser radiation when open and interlocks defeated avoid exposure to beam.
- ■ Advarsel: Usynlig laserståling ved åbning, når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling.

VAROITUS!

Laiteen Käyttäminen muulla kuin tässä käyttöohjeessa mainitulla tavalla saataa altistaa käyt-täjän turvallisuusluokan 1 ylittävälle näkymättömälle lasersäteilylle.

VARNING!

Om apparaten används på annat sätt än vad som specificeras i denna bruksanvising, kan användaren utsättas för osynling laserstrålning, som överskrider gränsen för laserklass 1.

CAUTION

Use of controls or adjustments or performance of procedures other than those specified herin may result in hazardous radiation exposure.

ATTENTION

L’utillisation de commandes, réglages ou procédures autres que ceux spécifiés peut entraîner une dangereuse exposition aux radiations.

ADVARSEL

Usynlig laserståling ved åbning, når sikkerhedsafbrydereer ude af funktion. Undgå udsættelse for stråling.

This Compact Disc player is classified as a CLASS 1 LASER product.
The CLASS 1 LASER PRODUCT label is located on the rear exterior.

CLASS 1	LASER PRODUCT
KLASSE 1	LASER PRODUKT
LUOKAN 1	LASER LAITE
KLASS 1	LASER APPARAT

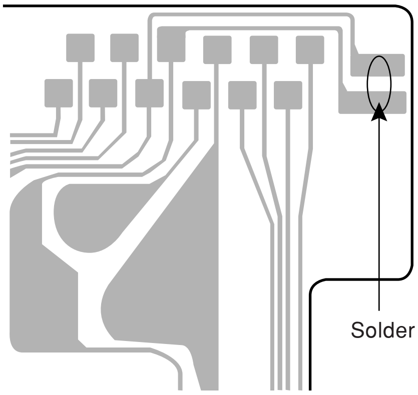
Precaution to replace Optical block

(KSS-213F)

Body or clothes electrostatic potential could ruin laser diode in the optical block. Be sure ground body and workbench, and use care the clothes do not touch the diode.

1) After the connection, remove solder shown in right figure.

PICK-UP Assy P.C.B



NOTE ON BEFORE STARTING REPAIR

1. Forced discharge of electrolytic capacitor of power supply block

When repair is going to be attempted in the set that uses relay circuit in the power supply block, electric potential is kept charged across the electrolytic capacitors (C101, 102) even though AC power cord is removed. If repair is attempted in this condition, secondary defect can occur.
In order to prevent the secondary trouble, perform the following measures before starting repair work.

Discharge procedure

① Remove the AC power cord.
② Connect a discharging resistor at an end of lead wire that has clips at both ends. Connect the other end of the lead wire to metal chassis.
③ Contact the other end of the discharging resistor to the positive (+) side (+VH) of C101. (For two seconds)
④ Contact the same end of the discharging resistor as step ③ to the negative (-) side (-VH) of C102 in the same way. (For two seconds)
⑤ Check that voltage across C101 and C102 has decreased to 1 V or less using a multimeter or an oscilloscope.

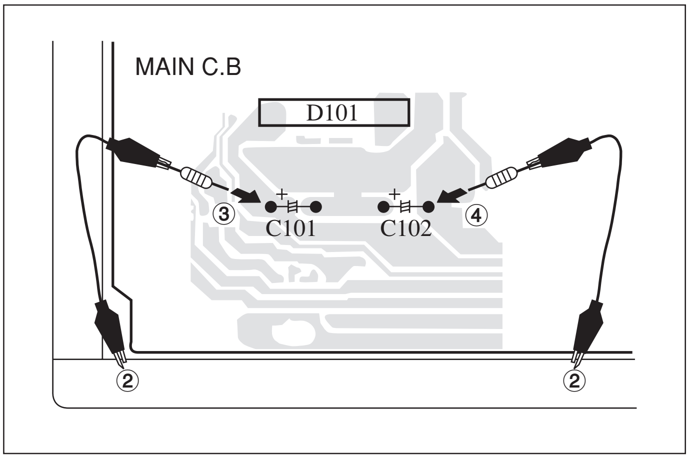


Fig-1

Select a discharging resistor referring to the following table.

Charging voltage (V) (C101, 102)	Discharging resistor (Ω)	Rated power (W)	Parts number
25-48	100	3	87-A00-247-090
49-140	220	5	87-A00-232-090

Note: The reference numbers (C101, C102) of the electrolytic capacitors can change depending on the models. Be sure to check the reference numbers of the charging capacitors on schematic diagram before starting the discharging work.

2. Check items before exchanging the MICROCOMPUTER

Be sure to check the following items before exchanging the MICROCOMPUTER. Exchange the MICROCOMPUTER after confirming that the MICROCOMPUTER is surely defective.

2-1. Regarding the HOLD terminal of the MICROCOMPUTER

When the HOLD terminal (INPUT) of the MICROCOMPUTER is “H”, the MICROCOMPUTER is judged to be operating correctly. When this terminal is “L”, the main power cannot be turned on. Therefore, be sure to check the terminal voltage of the HOLD terminal before exchange.
When the MICROCOMPUTER is not defective, the HOLD terminal can also go “L” when the POWER AMPLIFIER has any abnormalities that triggers the abnormality detection circuit on the MAIN C. B. that sets the HOLD terminal to “L”.

- Good or no good judgement of the MICROCOMPUTER

① Turn on the AC main power.
② Confirm that the main power is turned on and the HOLD terminal of the MICROCOMPUTER keeps the “H” level or not.
③ When the HOLD terminal is “L” level, the abnormality detection circuit is judged to be working correctly and the MICROCOMPUTER is judged to be good.

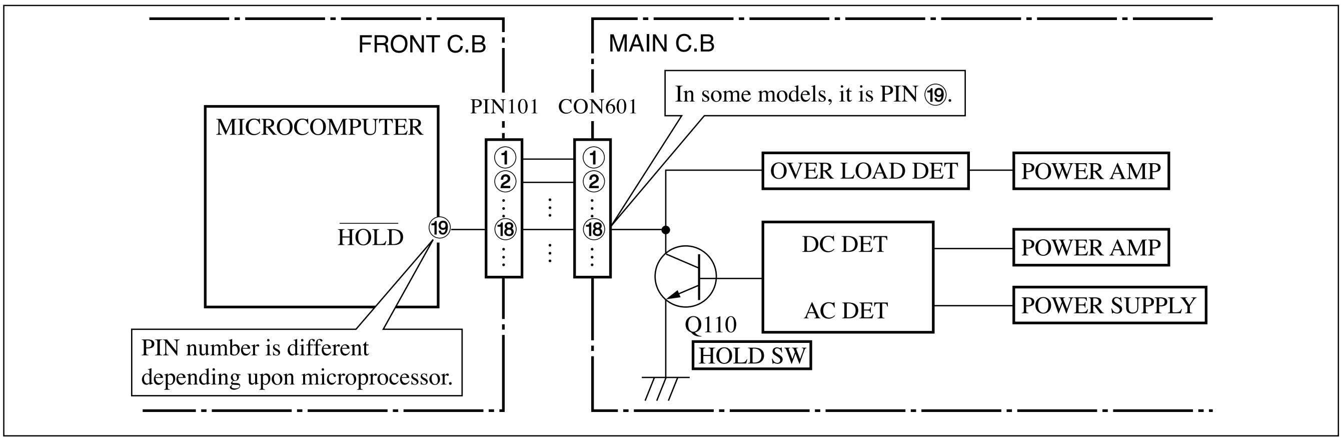


Fig-2-1

In such a case, check also if the POWER AMPLIFIER circuit or power supply circuit has any abnormalities or not.

2-2. Regarding reset

There are cases that the machine does not work correctly because the MICROCOMPUTER is not reset even though the AC power cord is re-inserted, or the software reset (pressing the STOP key + POWER key) is performed.
When the above described phenomenon occurs, it can lead to wrong judgement as if the MICROCOMPUTER is defective and to exchange the MICROCOMPUTER. In such a case, perform the forced-reset by the following procedure and check good or no good of the MICROCOMPUTER.

① Remove the AC power cord.

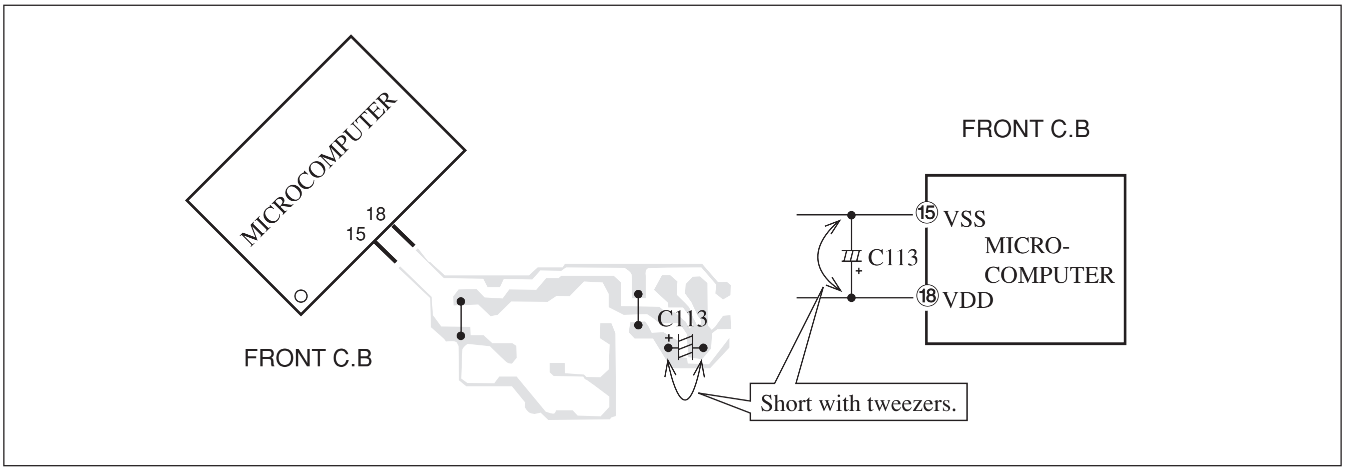


Fig-2-2

② Short both ends of the electrolytic capacitor C113 that is connected to VDD of the MICROCOMPUTER with tweezers.

③ Connect the AC power cord again. If the MICROCOMPUTER returns to the normal operation, the MICROCOMPUTER is good.

Note: The reference number or MICROCOMPUTER pin number of transistor (Q110) and electrolytic capacitor (C113) can change depending on the models. Be sure to check the reference numbers on schematic diagram before starting the discharging work.

2-3. Confirmation of soldering state of MICROCOMPUTER

Check the soldering state of the MICROCOMPUTER in addition to the above described procedures. Be sure to exchange the MICROCOMPUTER after surely confirming that the trouble is not caused by poor soldering but the MICROCOMPUTER itself.

ELECTRICAL MAIN PARTS LIST

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
IC			
	8A-MA3-656-010		C-IC,LC876580W-5P55
	87-A21-418-010		IC,STK490-340<8LH>
	87-A21-397-010		IC,STK490-070
	87-A21-021-040		C-IC,BU2099FV
	87-A20-783-040		C-IC,BA7762AFS
	87-A21-577-040		C-IC,M61506FP
	87-A21-482-010		IC,RPM6938-H4
	87-A21-018-040		C-IC,M65849BFP631D<8LH>
	87-A21-452-010		C-IC,BD3876KS2
	87-070-289-040		IC,BU 2092F
	87-A21-415-010		IC,LA1843
	87-A21-051-040		C-IC,BU9990-03FS<8LH>
	87-070-127-110		IC,LC72131 D
	87-020-454-010		IC,DN6851
TRANSISTOR			
	87-026-609-080		TR,KTA1266GR
	87-026-610-080		TR,KTC3198GR
	87-A30-076-080		C-TR,2SC3052F
	87-A30-075-080		C-TR,2SA1235F
	87-A30-318-080		TR,CSA952K
	89-213-702-010		TR,2SB1370E
	87-A30-218-080		TR,2SB1237Q
	87-A30-257-080		C-TR,2SD1306E
	87-A30-107-070		C-TR,CMBT5401
	87-026-245-080		TR,DTC114ES
	87-A30-198-080		TR,KTC3199GR
	87-A30-484-080		C-TR,KRA 102S
	87-A30-269-040		C-FET,2SJ461-T1
	87-A30-190-080		TR,CC5551<7U>
	87-A30-087-080		C-FET,2SK2158
	87-A30-097-010		TR,FN 1016<7U>
	87-A30-468-080		C-TR,KRC 102S-RTK
	87-A30-098-010		TR,FP 1016<7U>
	87-A30-106-070		C-TR,CMBT5551<8LH>
	87-A30-106-040		C-TR,CMBT5551<7U>
	87-A30-107-080		C-TR,CMBT5401
	87-A30-073-080		C-TR,RT1N 141C
	87-A30-329-080		TR,CD1585BC
	87-A30-063-080		C-TR,KRA 104S
	87-A30-074-080		C-TR,RT1P 141C<7U>
	87-A30-186-010		FET,2SK3053<7U>
	89-327-143-080		TR,2SC2714O(0.1W)
	87-A30-489-080		C-TR,KRA107S
	87-A30-234-080		TR,CSC4115BC
	87-026-463-080		TR,2SA933SRS
DIODE			
	87-020-465-080		DIODE,1SS133 (110MA)
	87-A40-673-090		DIODE,D10XB20
	87-A40-553-080		DIODE,1N4003 LES
	87-A40-780-080		ZENER,UZ33BSD
	87-A40-736-080		DIODE,1N4148M(SEM)
	87-A40-764-080		ZENER,UZ10BSC
	87-A40-313-080		C-DIODE,MC 2840
	87-A40-270-080		C-DIODE,MC2838
	87-A40-269-080		C-DIODE,MC2836
	87-A40-768-080		ZENER,UZ 16BSA
	87-017-447-010		DIODE,GBU4DL
	87-017-154-080		ZENER,HZS6C3L
	87-020-331-080		CHIP-DIODE,DAN202K
	87-017-654-060		DIODE,GBU6J
	87-A40-488-080		DIODE,1SS244<7U>
	87-A40-751-080		ZENER,UZ6.2BSB
	87-A40-747-080		ZENER,UZ5.1BSB
	87-A40-646-010		DIODE,FMB-G16L<7U>
	87-A40-802-080		ZENER,UZ5.1BSC

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
	87-A40-745-080		ZENER,UZ4.7BSA
	87-A40-749-080		ZENER,UZ5.6BSB<8LH>
	87-017-149-080		ZENER,HZS6A2L
MAIN C.B			
C3	87-A10-712-080		C-CAP,S 0.22-50 F
C4	87-A10-712-080		C-CAP,S 0.22-50 F
C21	87-016-035-090		CAP, E 6800-35 VR
C22	87-016-035-090		CAP, E 6800-35 VR
C25	87-016-300-080		CAP, ELECT 22-100
C26	87-016-300-080		CAP, ELECT 22-100
C27	87-016-300-080		CAP, ELECT 22-100
C28	87-016-300-080		CAP, ELECT 22-100
C31	87-010-263-080		CAP, ELECT 100-10V
C32	87-010-197-080		CAP, CHIP 0.01-25
C33	87-010-263-080		CAP, ELECT 100-10V<7U>
C34	87-010-247-080		CAP, ELECT 100-50V
C35	87-010-380-080		CAP, ELECT 47-16V
C36	87-010-381-080		CAP, ELECT 330-16V
C38	87-010-385-080		CAP, ELECT 220-25V
C39	87-010-385-080		CAP, ELECT 220-25V
C40	87-010-197-080		CAP, CHIP 0.01-25
C60	87-010-403-080		CAP, ELECT 3.3-50V
C61	87-010-260-080		CAP, ELECT 47-25V
C80	87-010-401-080		CAP, ELECT 1-50V
C81	87-010-374-080		CAP, ELECT 47-10V
C82	87-010-380-080		CAP, ELECT 47-16V
C104	87-010-196-080		CHIP CAPACITOR,0.1-25
C105	87-010-196-080		CHIP CAPACITOR,0.1-25
C111	87-010-401-080		CAP, ELECT 1-50 M<8LH>
C112	87-010-401-080		CAP, ELECT 1-50 M<8LH>
C113	87-010-545-080		CAP, ELECT 0.22-50V
C114	87-010-545-080		CAP, ELECT 0.22-50V
C115	87-010-546-080		CAP, ELECT 0.33-50V
C116	87-010-546-080		CAP, ELECT 0.33-50V
C117	87-010-196-080		CHIP CAPACITOR,0.1-25
C121	87-010-404-080		CAP, ELECT 4.7-50V
C122	87-010-404-080		CAP, ELECT 4.7-50V
C171	87-012-368-080		C-CAP,S 0.1-50 F
C172	87-012-368-080		C-CAP,S 0.1-50 F
C173	87-012-368-080		C-CAP,S 0.1-50 F
C174	87-012-368-080		C-CAP,S 0.1-50 F
C301	87-010-318-080		C-CAP,S 47P-50 CH
C302	87-010-318-080		C-CAP,S 47P-50 CH
C303	87-012-157-080		C-CAP,S 330P-50 CH
C304	87-012-157-080		C-CAP,S 330P-50 CH
C305	87-012-157-080		C-CAP,S 330P-50 CH
C306	87-012-157-080		C-CAP,S 330P-50 CH
C307	87-010-196-080		CHIP CAPACITOR,0.1-25
C309	87-010-196-080		CHIP CAPACITOR,0.1-25
C310	87-010-196-080		CHIP CAPACITOR,0.1-25
C311	87-010-198-080		CAP, CHIP 0.022-25
C312	87-010-198-080		CAP, CHIP 0.022-25
C313	87-010-178-080		CHIP CAP 1000P-50
C314	87-010-178-080		CHIP CAP 1000P-50
C315	87-010-178-080		CHIP CAP 1000P-50
C316	87-010-178-080		CHIP CAP 1000P-50
C321	87-012-142-080		CAP, S 0.33-16
C322	87-012-142-080		CAP, S 0.33-16
C324	87-010-260-080		CAP, ELECT 47-25V
C325	87-010-370-080		CAP,E 330-6.3 SME
C327	87-010-404-080		CAP, ELECT 4.7-50V
C328	87-010-404-080		CAP, ELECT 4.7-50V
C332	87-010-196-080		CHIP CAPACITOR,0.1-25
C335	87-010-401-080		CAP, ELECT 1-50V
C336	87-010-401-080		CAP, ELECT 1-50V
C337	87-010-196-080		CHIP CAPACITOR,0.1-25
C339	87-010-196-080		CHIP CAPACITOR,0.1-25
C340	87-010-196-080		CHIP CAPACITOR,0.1-25

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C351	87-012-140-080		CAP 470P-50
C352	87-012-140-080		CAP 470P-50
C354	87-010-175-080		CAP 560P-50
C355	87-010-178-080		C-CAP,S 1000P-50 KB
C356	87-010-260-080		CAP, ELECT 47-25V
C357	87-010-197-080		CAP, CHIP 0.01-25 KB
C358	87-010-183-080		C-CAP,S 2700P-50 B
C359	87-010-183-080		C-CAP,S 2700P-50 B
C360	87-010-183-080		C-CAP,S 2700P-50 B
C370	87-010-196-080		CHIP CAPACITOR,0.1-25
C373	87-A11-177-080		C-CAP,S 0.15-16 K B
C374	87-A11-177-080		C-CAP,S 0.15-16 K B
C378	87-010-196-080		CHIP CAPACITOR,0.1-25 ZF
C379	87-010-406-080		CAP, ELECT 22-50
C380	87-010-406-080		CAP, ELECT 22-50
C386	87-010-196-080		CHIP CAPACITOR,0.1-25 ZF
C388	87-012-156-080		C-CAP,S 220P-50 J CH
C391	87-010-319-080		C-CAP,S 56P-50 J CH
C392	87-010-319-080		C-CAP,S 56P-50 J CH
C393	87-010-319-080		C-CAP,S 56P-50 J CH
C394	87-010-319-080		C-CAP,S 56P-50 J CH
C501	87-010-263-080		CAP, ELECT 100-10V<8LH>
C502	87-010-196-080		CHIP CAPACITOR,0.1-25<8LH>
C503	87-016-460-080		C-CAP,S 0.22-16 K B<8LH>
C504	87-016-460-080		C-CAP,S 0.22-16 K B<8LH>
C505	87-016-460-080		C-CAP,S 0.22-16 K B<8LH>
C506	87-010-184-080		CHIP CAPACITOR 3300P-50<8LH>
C507	87-010-177-080		C-CAP,S 820P-50 SL<8LH>
C508	87-016-669-080		C-CAP,S 0.1-25 K B<8LH>
C509	87-016-669-080		C-CAP,S 0.1-25 K B<8LH>
C510	87-010-184-080		CHIP CAPACITOR 3300P-50<8LH>
C511	87-010-177-080		C-CAP,S 820P-50 SL<8LH>
C512	87-016-460-080		C-CAP,S 0.22-16 K B<8LH>
C513	87-010-544-080		CAP, ELECT 0.1-50V<8LH>
C514	87-010-374-080		CAP, ELECT 47-10V<8LH>
C515	87-010-401-080		CAP, ELECT 1-50 M<8LH>
C516	87-010-401-080		CAP, ELECT 1-50 M<8LH>
C517	87-010-183-080		C-CAP,S 2700P-50 B<8LH>
C518	87-010-183-080		C-CAP,S 2700P-50 B<8LH>
C531	87-010-405-080		CAP, ELECT 10-50 M<8LH>
C532	87-010-196-080		CHIP CAPACITOR,0.1-25<8LH>
C533	87-010-196-080		CHIP CAPACITOR,0.1-25<8LH>
C534	87-012-156-080		C-CAP,S 220P-50 CH<8LH>
C535	87-010-178-080		CHIP CAP 1000P-50<8LH>
C536	87-010-196-080		CHIP CAPACITOR,0.1-25
C537	87-010-318-080		C-CAP,S 47P-50 CH<8LH>
C538	87-010-318-080		C-CAP,S 47P-50 CH<8LH>
C539	87-010-318-080		C-CAP,S 47P-50 CH<8LH>
C541	87-010-178-080		CHIP CAP 1000P-50<8LH>
C611	87-010-956-080		CHIP-CAP,S 0.068-25B
C612	87-010-369-080		C-CAP,S 0.033-25 K B
C613	87-010-190-080		S CHIP F 0.01-50
C614	87-016-669-080		C-CAP,S 0.1-25 K B
C616	87-010-185-080		C-CAP,S 3900P-50 K B
C617	87-010-194-080		CAP, CHIP 0.047-25ZF
C618	87-010-401-080		CAP, ELECT 1-50V
C619	87-010-263-080		CAP, ELECT 100-10V
C620	87-016-669-080		C-CAP,S 0.1-25 K B
C621	87-010-197-080		CAP, CHIP 0.01-25 KB
C623	87-010-401-080		CAP, ELECT 1-50V
C624	87-010-401-080		CAP, ELECT 1-50V
C626	87-A11-590-080		CAP, CHIP 0.047-16 KB
C627	87-010-400-080		CAP, ELECT 0.47-50V
C628	87-010-400-080		CAP, ELECT 0.47-50V
C629	87-A11-590-080		CAP, CHIP 0.047-16 KB
C630	87-010-263-080		CAP, ELECT 100-10V
C631	87-010-185-080		C-CAP,S 3900P-50 K B
C632	87-010-185-080		C-CAP,S 3900P-50 K B
C634	87-010-196-080		CHIP CAPACITOR,0.1-25
C635	87-A10-307-080		CAP-M,S 0.1-50

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C636	87-A10-307-080		CAP-M,S 0.1-50
C637	87-A10-307-080		CAP-M,S 0.1-50
C638	87-A10-307-080		CAP-M,S 0.1-50
C639	87-010-405-080		CAP, ELECT 10-50V
C644	87-010-401-080		CAP, ELECT 1-50V
C671	87-010-322-080		C-CAP,S 100P-50 CH
C672	87-010-322-080		C-CAP,S 100P-50 CH
C673	87-010-190-080		C-CAP,S 0.01-50 ZF
C679	87-010-196-080		CHIP CAPACITOR,0.1-25 ZF
C680	87-010-190-080		C-CAP,S 0.01-50 ZF
C682	87-010-196-080		CHIP CAPACITOR,0.1-25 ZF
C771	87-010-263-080		CAP, ELECT 100-10V
C772	87-010-197-080		CAP, CHIP 0.01-25KB
C782	87-010-197-080		CAP, CHIP 0.01-25KB
C783	87-010-197-080		CAP, CHIP 0.01-25KB
C784	87-010-197-080		CAP, CHIP 0.01-25KB
C785	87-010-197-080		CAP, CHIP 0.01-25KB
C786	87-010-197-080		CAP, CHIP 0.01-25KB
C788	87-010-149-080		C-CAP,S 5P-50 CH
C789	87-A12-052-080		C-CAP,S 0.033-25 J B
C790	87-A12-052-080		C-CAP,S 0.033-25 J B
C791	87-010-196-080		CHIP CAPACITOR,0.1-25
C792	87-010-197-080		CAP, CHIP 0.01-25KB
C793	87-010-404-080		CAP, ELECT 4.7-50V
C795	87-010-197-080		CAP, CHIP 0.01-25KB
C796	87-010-197-080		CAP, CHIP 0.01-25KB
C797	87-010-405-080		CAP, ELECT 10-50V
C798	87-010-197-080		CAP, CHIP 0.01-25KB
C799	87-010-407-080		CAP, ELECT 33-50V
C800	87-010-194-080		CAP, CHIP 0.047-25ZF
C801	87-010-403-080		CAP, ELECT 3.3-50V
C802	87-010-194-080		CAP, CHIP 0.047-25 ZF
C803	87-010-198-080		CAP, CHIP 0.022-25KB
C804	87-010-263-080		CAP, ELECT 100-10V
C807	87-010-400-080		CAP, ELECT 0.47-50V
C808	87-010-401-080		CAP, ELECT 1-50V
C809	87-010-401-080		CAP, ELECT 1-50V
C810	87-010-196-080		CHIP CAPACITOR,0.1-25
C811	87-010-403-080		CAP, ELECT 3.3-50V
C812	87-010-403-080		CAP, ELECT 3.3-50V
C814	87-010-197-080		CAP, CHIP 0.01-25
C815	87-010-403-080		CAP, ELECT 3.3-50V
C816	87-010-403-080		CAP, ELECT 3.3-50V
C819	87-010-179-080		CAP,CHIP S 1200P-50
C820	87-010-179-080		CAP,CHIP S 1200P-50
C821	87-010-405-080		CAP, ELECT 10-50V
C823	87-010-177-080		CAP, CHIP 820P-50 J SL
C824	87-010-405-080		CAP, ELECT 10-50
C825	87-010-596-080		CAP, S 0.047-16
C842	87-010-197-080		CAP, CHIP 0.01-25 KB
C844	87-010-197-080		CAP, CHIP 0.01-25 KB
C850	87-010-260-080		CAP, ELECT 47-25V
C851	87-010-197-080		CAP, CHIP 0.01-25 KB
C852	87-010-197-080		CAP, CHIP 0.01-25 KB
C853	87-010-197-080		CAP, CHIP 0.01-25 KB
C858	87-010-196-080		CHIP CAPACITOR,0.1-25
C859	87-010-196-080		CHIP CAPACITOR,0.1-25
C860	87-010-197-080		CAP, CHIP 0.01-25
C959	87-010-196-080		CHIP CAPACITOR,0.1-25
C960	87-010-196-080		CHIP CAPACITOR,0.1-25
C961	87-010-152-080		C-CAP,S 8P-50 CH
C963	87-015-785-080		CHIP CAPACITOR, 0.1-25ZF
C971	87-010-381-080		CAP, ELECT 330-16V
C972	87-010-404-080		CAP, ELECT 4.7-50V
C973	87-010-197-080		CAP, CHIP 0.01-25KB
C974	87-010-197-080		CAP, CHIP 0.01-25KB
C979	87-010-322-080		C-CAP,S 100P-50 CH
C981	87-010-260-080		CAP, ELECT 47-25V
C982	87-010-196-080		CHIP CAPACITOR,0.1-25
C983	87-010-197-080		CAP, CHIP 0.01-25KB

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C984	87-010-197-080		CAP, CHIP 0.01-25KB
C987	87-010-197-080		CAP, CHIP 0.01-25KB
C991	87-010-312-080		C-CAP,S 15P-50 CH
C992	87-010-312-080		C-CAP,S 15P-50 CH
C993	87-010-178-080		CHIP CAP 1000P-50
C995	87-010-178-080		CHIP CAP 1000P-50
C997	87-010-196-080		CHIP CAPACITOR,0.1-25
C998	87-010-260-080		CAP, ELECT 47-25V
C999	87-A11-155-080		CAP,TC U 0.01-16 Z F
CF831	87-008-261-010		FILTER, CFSFE10.7MA5
CF832	87-008-261-010		FILTER, CFSFE10.7MA5
CN1	87-A60-996-010		CONN,13P V BLK TAC-L13X-A3
CN91	87-A60-109-010		CONN,2P V S2M-2W
CN92	87-A60-109-010		CONN,2P V S2M-2W<7U>
CN101	87-A60-996-010		CONN,13P V BLK TAC-L13X-A3
CN301	87-A60-620-010		CONN,3P V 2MM JMT
CN351	87-A60-625-010		CONN,8P V 2MM JMT
CN601	87-099-719-010		CONN,30P TYK-B(X)
CN602	87-A60-131-010		CONN,6P V FE
CNA1	8A-NF8-653-010		CONN ASSY,9P TID-A(480)
CNA2	8A-NF6-640-010		CONN ASSY,3P (VM) ANF-6
FB501	87-008-372-080		FILTER, EMI BL OIRNI<8LH>
FC602	88-906-321-110		FF-CABLE,6P 1.25 320MM
FFE831	A8-8ZA-190-030		8ZA-1 FEUNM
J101	87-A60-483-010		JACK,DIA6.3 BLK ST W/S KM
J102	87-A60-238-010		TERMINAL,SP 4P
J603	87-A60-926-010		JACK,PIN 4P R/W/TC58-118
J831	87-A60-202-010		TERMINAL,ANT 4P MSP-154V-02
L101	87-A50-610-010		COIL,1UH K (MDEC)
L102	87-A50-610-010		COIL,1UH K (MDEC)
L301	87-A50-049-010		COIL,TRAP 85K(COI)
L302	87-A50-049-010		COIL,TRAP 85K(COI)
L351	87-007-342-010		COIL,OSC 85K BIAS
L801	87-A50-540-010		COIL,FM DET(TOK)
L802	87-A91-551-010		FLTR,PCFJZH-450 L(TOK)
L811	87-005-847-080		COIL,2.2UH(CECS)
L832	87-005-847-080		COIL,2.2UH(CECS)
L951	8A-NF8-667-010		COIL,AM PACK 4(TOK)
R117	87-010-805-080		C-CAP,S 1-16 ZF
R118	87-010-805-080		C-CAP,S 1-16 ZF
R161	87-A00-441-050		RES,270-1/2W J RP
R162	87-A00-441-050		RES,270-1/2W J RP
R163	87-A00-441-050		RES,270-1/2W J RP
R164	87-A00-441-050		RES,270-1/2W J RP
R790	87-010-197-080		C-CAP,S 0.01-25 KB
R991	87-010-322-080		C-CAP,S 100P-50 J CH
R993	87-010-322-080		C-CAP,S 100P-50 J CH
R995	87-010-322-080		C-CAP,S 100P-50 J CH
SFR351	87-A90-433-080		SFR,50K H NVZ6TLTA
SFR352	87-A90-433-080		SFR,50K H NVZ6TLTA
WH1	87-A90-510-010		HLDR,WIRE 2.5-9P
X991	87-A70-061-010		VIB,XTAL 4.500MHZ CSA-309

MICON C.B

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C101	87-010-498-040		CAP,E 10-16 GAS
C102	87-010-194-080		CAP, CHIP 0.047-25
C103	87-010-194-080		CAP, CHIP 0.047-25
C105	87-A11-242-040		CAP,E 220-10 M 5L SRM
C106	87-A11-242-040		CAP,E 220-10 M 5L SRM
C107	87-010-196-080		CHIP CAPACITOR,0.1-25
C111	87-016-460-080		C-CAP,S 0.22-16 K B
C112	87-010-493-040		CAP,E 0.47-50 GAS
C113	87-010-178-080		CHIP CAP 1000P-50
C114	87-018-209-080		CAP, TC U 0.01-50
C116	87-010-196-080		CHIP CAPACITOR,0.1-25
C122	87-012-369-080		C-CAP,S 0.047-50F
C123	87-010-408-040		CAP,E 47-50 SME
C124	87-010-421-040		CAP,E 4.7-50 5L
C125	87-010-421-040		CAP,E 4.7-50 5L
C132	87-012-156-080		C-CAP,S 220P-50 CH
C133	87-010-316-080		C-CAP,S 33P-50 CH
C135	87-018-209-080		CAP, TC U 0.01-50
C137	87-010-313-080		CAP, CHIP 18P-50
C138	87-010-196-080		CHIP CAPACITOR,0.1-25
C171	87-010-213-080		C-CAP,S 0.015-50 B
C172	87-010-183-080		C-CAP,S 2700P-50 B
C188	87-010-194-080		CAP, CHIP 0.047-25
C193	87-010-197-080		CAP, CHIP 0.01 DM
C251	87-010-196-080		CHIP CAPACITOR,0.1-25
C252	87-012-156-080		C-CAP,S 220P-50 CH
C253	87-010-322-080		C-CAP,S 100P-50 CH
C301	87-012-358-080		C-CAP,S 0.47-10 F Z
C302	87-010-171-080		C-CAP,S 270P-50 SL
C303	87-012-358-080		C-CAP,S 0.47-10 F Z
C304	87-012-358-080		C-CAP,S 0.47-10 F Z
C305	87-010-196-080		CHIP CAPACITOR,0.1-25
C306	87-010-196-080		CHIP CAPACITOR,0.1-25
C310	87-010-196-080		CHIP CAPACITOR,0.1-25
C311	87-010-405-040		CAP,E 10-50
C411	87-012-157-080		C-CAP,S 330P-50 CH
C412	87-010-405-040		CAP,E 10-50
C421	87-010-197-080		CAP, CHIP 0.01-25
C422	87-010-182-080		C-CAP,S 2200P-50 B
C940	87-012-145-080		CAP, CHIP S 270P-50 J CH
C941	87-012-145-080		CAP, CHIP S 270P CH
C942	87-012-145-080		CAP, CHIP S 270P CH
C943	87-012-145-080		CAP, CHIP S 270P CH
C944	87-012-145-080		CAP, CHIP S 270P CH
C945	87-012-145-080		CAP, CHIP S 270P CH
C946	87-012-145-080		CAP, CHIP S 270P CH
C947	87-012-145-080		CAP, CHIP S 270P CH
C948	87-012-145-080		CAP, CHIP S 270P CH
C949	87-012-145-080		CAP, CHIP S 270P CH
C950	87-012-145-080		CAP, CHIP S 270P CH
C951	87-012-145-080		CAP, CHIP S 270P CH
C952	87-012-145-080		CAP, CHIP S 270P CH
C962	87-012-155-080		C-CAP 180P-50CH<8LH>
C963	87-010-297-080		C-CAP,S 100P-50 CH<8LH>
C967	87-010-197-080		CAP, CHIP 0.01 DM<8LH>
C968	87-016-044-040		CAP,E 100-16 GAS<8LH>
C969	87-010-196-080		CHIP CAPACITOR,0.1-25<8LH>
C972	87-015-629-080		CAP CHIP 2200P-50<8LH>
C973	87-012-156-080		C-CAP,S 220P-50 CH<8LH>
C974	87-015-682-040		CAP,E 22-16 7L<8LH>
C975	87-010-071-040		CAP,E 1-50 M 5L SRE<8LH>
C976	87-010-060-040		CAP,E 100-16<8LH>
C977	87-010-197-080		CAP, CHIP 0.01-25<8LH>
CN101	87-099-720-010		CONN,30P TYK-B(P)
CN102	87-A60-162-010		CONN,14P H FE
CN103	87-A60-166-010		CONN,18P H FE
CN104	87-A60-163-010		CONN,15P H FE
CN301	87-A60-156-010		CONN,8P H FE
CNA105	8A-MA3-654-010		CONN ASSY,2P V 200MM
FB001	87-A90-896-080		F-BEAD,035600STY7
FC102	88-914-231-110		FF-CABLE,14P 1.25
FC103	88-918-231-110		FF-CABLE,18P 1.25
FC104	88-915-151-110		FF-CABLE,15P 1.25 150MM
FL101	8A-MA3-651-010		FL,BJ751GNK
L101	87-A50-333-010		COIL,OSC 9.43MHZ
L961	87-A50-093-010		COIL,CLOCK 5.76MHZ<8LH>
LED131	87-A40-317-080		LED,SLR-342VCT31 RED
LED201	87-A40-496-040		LED,SLR-342PCT31 GRN
LED202	87-A40-317-080		LED,SLR-342VCT31 RED
LED203	87-A40-496-040		LED,SLR-342PCT31 GRN
LED205	87-A40-317-080		LED,SLR-342VCT31 RED
LED206	87-A40-496-040		LED,SLR-342PCT31 GRN
LED207	87-A40-317-080		LED,SLR-342VCT31 RED
LED209	87-A40-496-040		LED,SLR-342PCT31 GRN
LED210	87-A40-317-080		LED,SLR-342VCT31 RED

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
LED211	87-A40-496-040		LED,SLR-342PCT31 GRN
LED212	87-A40-317-080		LED,SLR-342VCT31 RED
LED213	87-A40-317-080		LED,SLR-342VCT31 RED
LED214	87-A40-317-080		LED,SLR-342VCT31 RED
S401	87-A90-095-080		SW,TACT EVQ11G04M
S402	87-A90-095-080		SW,TACT EVQ11G04M
S403	87-A90-095-080		SW,TACT EVQ11G04M
S404	87-A90-095-080		SW,TACT EVQ11G04M<8LH>
S405	87-A90-095-080		SW,TACT EVQ11G04M
S421	87-A91-625-010		SW,RTRY EC12E24308-30MM

AMP IF C.B

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C3	87-010-186-080		CAP,CHIP 4700P-50<8LH>
C101	87-010-178-080		CHIP CAP 1000P-50
C102	87-010-178-080		CHIP CAP 1000P
C103	87-010-405-080		CAP, ELECT 10-50V
C104	87-010-405-080		CAP, ELECT 10-50V
C107	87-010-405-080		CAP, ELECT 10-50V<8LH>
C107	87-010-404-080		CAP, ELECT 4.7-50V<7U>
C108	87-010-405-080		CAP, ELECT 10-50V<8LH>
C108	87-010-404-080		CAP, ELECT 4.7-50V<7U>
C111	87-010-322-080		C-CAP,S 100P-50 CH<7U>
C112	87-010-322-080		C-CAP,S 100P-50 CH<7U>
C113	87-A10-812-080		C-CAP,S 220P-200 J CH<7U>
C113	87-010-260-080		CAP, ELECT 47-25V<8LH>
C114	87-A10-812-080		C-CAP,S 220P-200 J CH<7U>
C114	87-010-260-080		CAP, ELECT 47-25V<8LH>
C115	87-A10-119-080		CAP, ELECT 10-100 REA<8LH>
C116	87-A10-119-080		CAP, ELECT 10-100 REA<8LH>
C119	87-010-197-080		CAP, CHIP 0.01-25
C120	87-010-197-080		CAP, CHIP 0.01-25
C121	87-010-260-080		CAP, ELECT 47-25V<7U>
C122	87-010-260-080		CAP, ELECT 47-25V<7U>
C133	87-010-186-080		CAP,CHIP 4700P-50<8LH>
C173	87-010-186-080		CAP,CHIP 4700P-50<7U>
C174	87-010-186-080		CAP,CHIP 4700P-50<7U>
C203	87-A10-300-080		CAP,M 0.027-50 J
C204	87-A10-300-080		CAP,M 0.027-50 J
C205	87-010-177-080		C-CAP,S 820P-50 SL
C206	87-010-177-080		C-CAP,S 820P-50 SL
C207	87-010-403-080		CAP, ELECT 3.3-50V
C208	87-010-403-080		CAP, ELECT 3.3-50V
C209	87-010-184-080		CHIP CAPACITOR 3300P-50<7U>
C210	87-010-184-080		CHIP CAPACITOR 3300P-50<7U>
C211	87-010-403-080		CAP, ELECT 3.3-50V
C212	87-010-403-080		CAP, ELECT 3.3-50V
C215	87-012-156-080		C-CAP,S 220P-50
C216	87-012-156-080		C-CAP,S 220P-50
C217	87-010-260-080		CAP, ELECT 47-25V
C218	87-010-260-080		CAP, ELECT 47-25V
C221	87-010-405-080		CAP, ELECT 10-50V
C222	87-010-405-080		CAP, ELECT 10-50V
C223	87-010-197-080		CAP, CHIP 0.01-25
C224	87-010-197-080		CAP, CHIP 0.01-25
C249	87-012-368-080		CHIP CAPACITOR 0.1-50 ZF<7U>
C251	87-010-993-080		C-CAP,S 0.056-25 B
C252	87-010-196-080		CHIP CAPACITOR,0.1-25
C253	87-010-196-080		CHIP CAPACITOR,0.1-25
C254	87-010-993-080		C-CAP,S 0.056-25 B
C255	87-010-190-080		S CHIP F 0.01-50
C256	87-010-190-080		S CHIP F 0.01-50
C291	87-010-374-080		CAP, ELECT 47-10V<8LH>
C402	87-010-196-080		CHIP CAPACITOR,0.1-25<7U>
C413	87-A10-119-080		CAP,E 10-100 REA<7U>
C414	87-A10-119-080		CAP,E 10-100 REA<7U>
CNA101	8A-NF8-656-010		CONN ASSY,5P TID-A 400<8LH>
CNA103	8A-NF8-656-010		CONN ASSY,5P TID-A 400<7U>
CON101	87-A61-011-010		CONN,13P H BLK TAC-L13P-A3
CON102	87-A61-011-010		CONN,13P H BLK TAC-L13P-A3

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
J201	87-A61-148-010		JACK,PIN 4P R/W BLUE
L251	87-A50-610-010		COIL,1UH-S
L252	87-A50-610-010		COIL,1UH-S
R131	87-A00-262-080		RES,M/F 0.15-2W J<8LH>
R132	87-A00-262-080		RES,M/F 0.15-2W J<8LH>
R161	87-A00-418-010		RES,M/F 0.15-3W J<7U>
R162	87-A00-418-010		RES,M/F 0.15-3W J<7U>
R165	87-A00-418-010		RES,M/F 0.15-3W J<7U>
R166	87-A00-418-010		RES,M/F 0.15-3W J<7U>
R231	87-A00-258-080		RES,M/F 0.22-1W J
R232	87-A00-258-080		RES,M/F 0.22-1W J
R243	87-A00-258-080		RES,M/F 0.22-1W J<7U>
R244	87-A00-258-080		RES,M/F 0.22-1W J<7U>
RY201	87-A91-686-010		RELAY, G5PA-28(OMRON)<7U>
TH101	87-A91-042-080		C-THMS,100K 55001<7U>
TH102	87-A91-042-080		C-THMS,100K 55001<7U>
WH101	87-A90-459-010		HLDR 2.5-5P
WH103	87-A90-459-010		HLDR,WIRE 2.5-5P<7U>

CNTL C.B

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C602	87-010-069-040		CAP,E 0.33-50
C603	87-010-319-080		C-CAP,S 56P-50 CH
C604	87-010-178-080		CHIP CAP 1000P-50
C606	87-015-785-080		CHIP CAPACITOR, 0.1-25
C607	87-010-060-040		CAP,E 100-16
C611	87-010-186-080		CAP,CHIP 4700P-50
C612	87-015-699-040		CAP,E 10-50
C621	87-015-691-040		CAP,E0.1-50 SRA<7U>
C622	87-010-544-040		CAP,E 0.1-50 SME<7U>
C623	87-010-178-080		CHIP CAP 1000P<7U>
C624	87-010-319-080		C-CAP,S 56P-50 CH<7U>
C624	87-010-163-080		C-CAP,S 56P-50 SL<7U>
C625	87-010-405-040		CAP,E 10-50<7U>
C651	87-010-182-080		C-CAP,S 2200P-50 B
C652	87-010-197-080		CAP, CHIP 0.01-25
C661	87-010-196-080		CHIP CAPACITOR,0.1-25
C662	87-010-196-080		CHIP CAPACITOR,0.1-25
C663	87-012-156-080		C-CAP,S 220P-50 CH
C664	87-012-156-080		C-CAP,S 220P-50 CH
C686	87-010-196-080		CHIP CAPACITOR,0.1-25
C692	87-010-196-080		CHIP CAPACITOR,0.1-25
C846	87-010-196-080		CHIP CAPACITOR,0.1-25
CN661	87-A60-166-010		CONN,18P H FE
CNA602	8A-MA3-655-010		CONN ASSY,2P V 60MM
LED671	87-A40-317-080		LED,SLR-342VCT31 RED
LED672	87-A40-317-080		LED,SLR-342VCT31 RED
LED673	87-A40-317-080		LED,SLR-342VCT31 RED
LED674	87-A40-317-080		LED,SLR-342VCT31 RED
LED675	87-A40-317-080		LED,SLR-342VCT31 RED
LED677	87-A40-317-080		LED,SLR-342VCT31 RED
LED678	87-A40-317-080		LED,SLR-342VCT31 RED
LED679	87-A40-317-080		LED,SLR-342VCT31 RED
LED680	87-A40-619-040		LED,SLR-56PT-T31-W GRN
LED681	87-A40-619-040		LED,SLR-56PT-T31-W GRN
LED682	87-A40-619-040		LED,SLR-56PT-T31-W GRN
LED683	87-A40-619-040		LED,SLR-56PT-T31-W GRN
LED684	87-A40-619-040		LED,SLR-56PT-T31-W GRN
LED685	87-A40-619-040		LED,SLR-56PT-T31-W GRN
LED686	87-A40-678-010		LED,SELU1E10CXM BLUE-DEF
LED692	87-A40-678-010		LED,SELU1E10CXM BLUE-DEF
S651	87-A91-624-010		SW,RTRY EC12E1240405-20MM
S805	87-A90-095-080		SW,TACT EVQ11G04M<8LH>
S806	87-A90-095-080		SW,TACT EVQ11G04M
S807	87-A90-095-080		SW,TACT EVQ11G04M
S808	87-A90-095-080		SW,TACT EVQ11G04M
S809	87-A90-095-080		SW,TACT EVQ11G04M
S810	87-A90-095-080		SW,TACT EVQ11G04M
S811	87-A90-095-080		SW,TACT EVQ11G04M
S812	87-A90-095-080		SW,TACT EVQ11G04M

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
S813	87-A90-095-080		SW,TACT EVQ11G04M
S815	87-A90-095-080		SW,TACT EVQ11G04M
S816	87-A90-095-080		SW,TACT EVQ11G04M
S817	87-A90-095-080		SW,TACT EVQ11G04M<8LH>
S821	87-A90-095-080		SW,TACT EVQ11G04M
S822	87-A90-095-080		SW,TACT EVQ11G04M
S823	87-A90-095-080		SW,TACT EVQ11G04M
S824	87-A90-095-080		SW,TACT EVQ11G04M
S825	87-A90-095-080		SW,TACT EVQ11G04M
S826	87-A90-095-080		SW,TACT EVQ11G04M
S827	87-A90-095-080		SW,TACT EVQ11G04M
S828	87-A90-095-080		SW,TACT EVQ11G04M
S829	87-A90-095-080		SW,TACT EVQ11G04M
S830	87-A90-095-080		SW,TACT EVQ11G04M
S831	87-A90-095-080		SW,TACT EVQ11G04M
S832	87-A90-095-080		SW,TACT EVQ11G04M<8LH>
S833	87-A90-095-080		SW,TACT EVQ11G04M<8LH>
S834	87-A90-095-080		SW,TACT EVQ11G04M<8LH>
S835	87-A90-095-080		SW,TACT EVQ11G04M<8LH>
S842	87-A90-095-080		SW,TACT EVQ11G04M
S843	87-A90-095-080		SW,TACT EVQ11G04M
S844	87-A90-095-080		SW,TACT EVQ11G04M
S845	87-A90-095-080		SW,TACT EVQ11G04M
S846	87-A90-095-080		SW,TACT EVQ11G04M
S847	87-A90-095-080		SW,TACT EVQ11G04M
S848	87-A90-095-080		SW,TACT EVQ11G04M
S849	87-A90-095-080		SW,TACT EVQ11G04M
S850	87-A90-095-080		SW,TACT EVQ11G04M
S851	87-A90-095-080		SW,TACT EVQ11G04M
VR621	8Z-MA3-603-010		VR,SL 10KB RS15111-20<7U>

MIC C.B

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C601	87-010-196-080		CHIP CAPACITOR,0.1-25
CN601	87-A60-619-010		CONNECTOR 2P V 2MM
FB603	83-XM1-617-080		C-COIL,BK 2125HM 601
J601	87-099-659-010		JACK,6.3 JY-6314-01130
J602	87-099-659-010		JACK,6.3 JY-6314-01130

KEY CD C.B

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
CN701	87-A60-156-010		CONN,8P H FE
FC701	88-908-231-110		FF-CABLE,8P 1.25
LED771	87-A40-317-080		LED,SLR-342VCT31 RED
LED772	87-A40-317-080		LED,SLR-342VCT31 RED
LED773	87-A40-317-080		LED,SLR-342VCT31 RED
LED774	87-A40-317-080		LED,SLR-342VCT31 RED
LED775	87-A40-317-080		LED,SLR-342VCT31 RED
S751	87-A90-095-080		SW,TACT EVQ11G04M
S752	87-A90-095-080		SW,TACT EVQ11G04M
S753	87-A90-095-080		SW,TACT EVQ11G04M
S754	87-A90-095-080		SW,TACT EVQ11G04M
S755	87-A90-095-080		SW,TACT EVQ11G04M
S756	87-A90-095-080		SW,TACT EVQ11G04M
S757	87-A90-095-080		SW,TACT EVQ11G04M

DK1 LED C.B

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
LED724	87-A40-619-040		LED,SLR-56PT-T31-W GRN
LED725	87-A40-589-040		LED,SLR-56VCT31 RED
LED726	87-A40-619-040		LED,SLR-56PT-T31-W GRN

DK2 LED C.B

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
CN721	87-A60-619-010		CONNECTOR 2P V 2MM
CNA722	8A-MA3-653-010		CONN ASSY,2P V 100MM
LED721	87-A40-619-040		LED,SLR-56PT-T31-W GRN
LED722	87-A40-589-040		LED,SLR-56VCT31 RED
LED723	87-A40-619-040		LED,SLR-56PT-T31-W GRN

VM C.B

PT C.B

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C1	87-A11-148-080		CAP,TC U 0.1-50 Z F
C2	87-A11-148-080		CAP,TC U 0.1-50 Z F
C3	87-A11-148-080		CAP,TC U 0.1-50 Z F
C4	87-A11-148-080		CAP,TC U 0.1-50 Z F
C5	87-A11-148-080		CAP,TC U 0.1-50 Z F
C6	87-A11-148-080		CAP,TC U 0.1-50 Z F
C7	87-A11-148-080		CAP,TC U 0.1-50 Z F
C8	87-A11-148-080		CAP,TC U 0.1-50 Z F
C101	87-010-387-080		CAP,E 470-25 SME
C103	87-A11-148-080		CAP,TC U 0.1-50 Z F
C104	87-A11-148-080		CAP,TC U 0.1-50 Z F
C105	87-A11-148-080		CAP,TC U 0.1-50 Z F
C106	87-A11-148-080		CAP,TC U 0.1-50 Z F
C107	87-A11-148-080		CAP,TC U 0.1-50 Z F
C108	87-A11-148-080		CAP,TC U 0.1-50 Z F
C109	87-A11-148-080		CAP,TC U 0.1-50 Z F
C110	87-A11-148-080		CAP,TC U 0.1-50 Z F
C111	87-010-917-000		CAP,E 3300-50 M SMG
C112	87-010-917-000		CAP,E 3300-50 M SMG
C113	87-016-657-090		CAP,E 3300-71 M SMG<8LH>
C113	87-A10-231-090		CAP,E 3300-80<7U>
C114	87-016-657-090		CAP,E 3300-71 M SMG<8LH>
C114	87-A10-231-090		CAP,E 3300-80<7U>
C116	87-010-403-040		CAP,E 3.3-50 SME
CN1	87-A61-110-010		CONN,9P V TID-A
CN2	87-A61-108-010		CONN,5P V TID-A
⚠ F101	87-035-458-010		FUSE,4A 250V T W/C<8LH>
⚠ F101	87-035-493-010		FUSE,8A 125V<7U>
⚠ F102	87-035-458-010		FUSE,4A 250V T W/C<8LH>
⚠ FC101	87-033-213-080		CLAMP, FUSE
⚠ FC102	87-033-213-080		CLAMP, FUSE<8LH>
⚠ FC103	87-033-213-080		CLAMP, FUSE<8LH>
⚠ FC104	87-033-213-080		CLAMP, FUSE
⚠ PT1	8A-MA3-663-010		PT,AMA-3 LH<8LH>
⚠ PT1	8A-MA3-661-010		PT,AMA-3 U<7U>
⚠ PT2	8A-NF8-673-010		PT,SUB ANF-8 (H)KAMI<8LH>
⚠ PT2	8A-NF8-661-010		PT,SUB ANF-8 (U)<7U>
⚠ PR103	87-026-691-080		FUSE,10A 125V 251<7U>
⚠ PR103	87-026-682-080		PROTECTOR,10A 60V491<8LH>
⚠ PR106	87-026-691-080		FUSE,10A 125V 251<7U>
⚠ PR106	87-026-682-080		PROTECTOR 10A 49/SERIES 60V<8LH>
⚠ PR108	87-A91-276-080		FUSE,125MA 125V F 251<7U>
⚠ RY101	87-A91-300-010		RELAY,AC 12V-ALA2PF12<8LH>
⚠ RY102	87-A90-976-010		RELAY,AC12V SDT-S-112LMR<7U>
⚠ S101	87-A90-165-010		SW,SL 1-2-3 SWS2301<8LH>
⚠ T101	87-A60-317-010		TERMINAL, 1P MSC
⚠ T102	87-A60-317-010		TERMINAL, 1P MSC

DECK C.B

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
CON502	87-099-756-010		CONN,15P 9604S F
SFR1	87-024-581-010		SFR,3.3K DIA 6H
SOL1	82-ZM1-626-010		SOL ASSY,27K
SOL2	82-ZM1-626-010		SOL ASSY,27K
SW1	87-A90-248-010		SW,MICRO ESE11SH2CXQ
SW2	87-A90-248-010		SW,MICRO ESE11SH2CXQ
SW3	87-A90-248-010		SW,MICRO ESE11SH2CXQ
SW4	87-036-110-010		SW,MICRO SPPB62
SW5	87-036-110-010		SW,MICRO SPPB62
SW6	87-036-110-010		SW,MICRO SPPB62
SW8	87-A90-248-010		SW,MICRO ESE11SH2CXQ
SW9	87-A90-248-010		SW,MICRO ESE11SH2CXQ
W1	82-ZM3-601-010		RBN-CORD,4P-75

HEAD-1 C.B

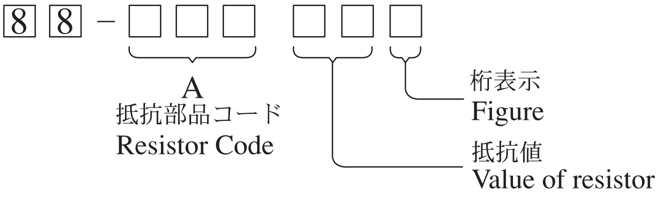
REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
	85-ZM3-601-010		PWB,FLEX I
CON301	85-MA2-615-010		CONN ASSY,3P-PH

HEAD-2 C.B

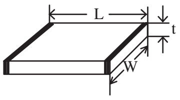
	85-ZM3-601-010	PWB,FLEX I
CON351	83-NEG-608-010	CONN ASSY,8P-RPB

○チップ抵抗部品コード／CHIP RESISTOR PART CODE

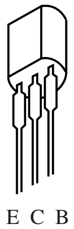
チップ抵抗部品コードの成り立ち
Chip Resistor Part Coding


8 8 –
A
抵抗部品コード
Resistor Code
桁表示
Figure
抵抗値
Value of resistor

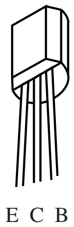
チップ抵抗
Chip resistor

容量 Wattage	種類 Type	許容誤差 Tolerance	記号 Symbol	寸法／Dimensions (mm)				抵抗コード : A Resistor Code : A
				外形／Form	L	W	t	
1/16W	1005	± 5%	CJ		1.0	0.5	0.35	104
1/16W	1608	± 5%	CJ		1.6	0.8	0.45	108
1/10W	2125	± 5%	CJ		2	1.25	0.45	118
1/8W	3216	± 5%	CJ		3.2	1.6	0.55	128

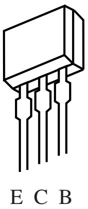
TRANSISTOR ILLUSTRATION



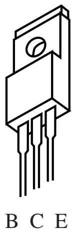
CD1585
CSA952
CSC4115
KTA1266
KTC3198
KTC3199



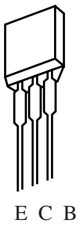
CC5551



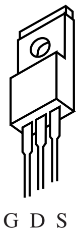
2SB1237



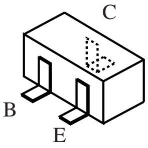
2SB1370
FN1016
FP1016



2SA933
DTC114ES

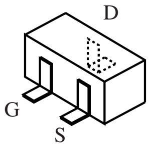


2SK3053



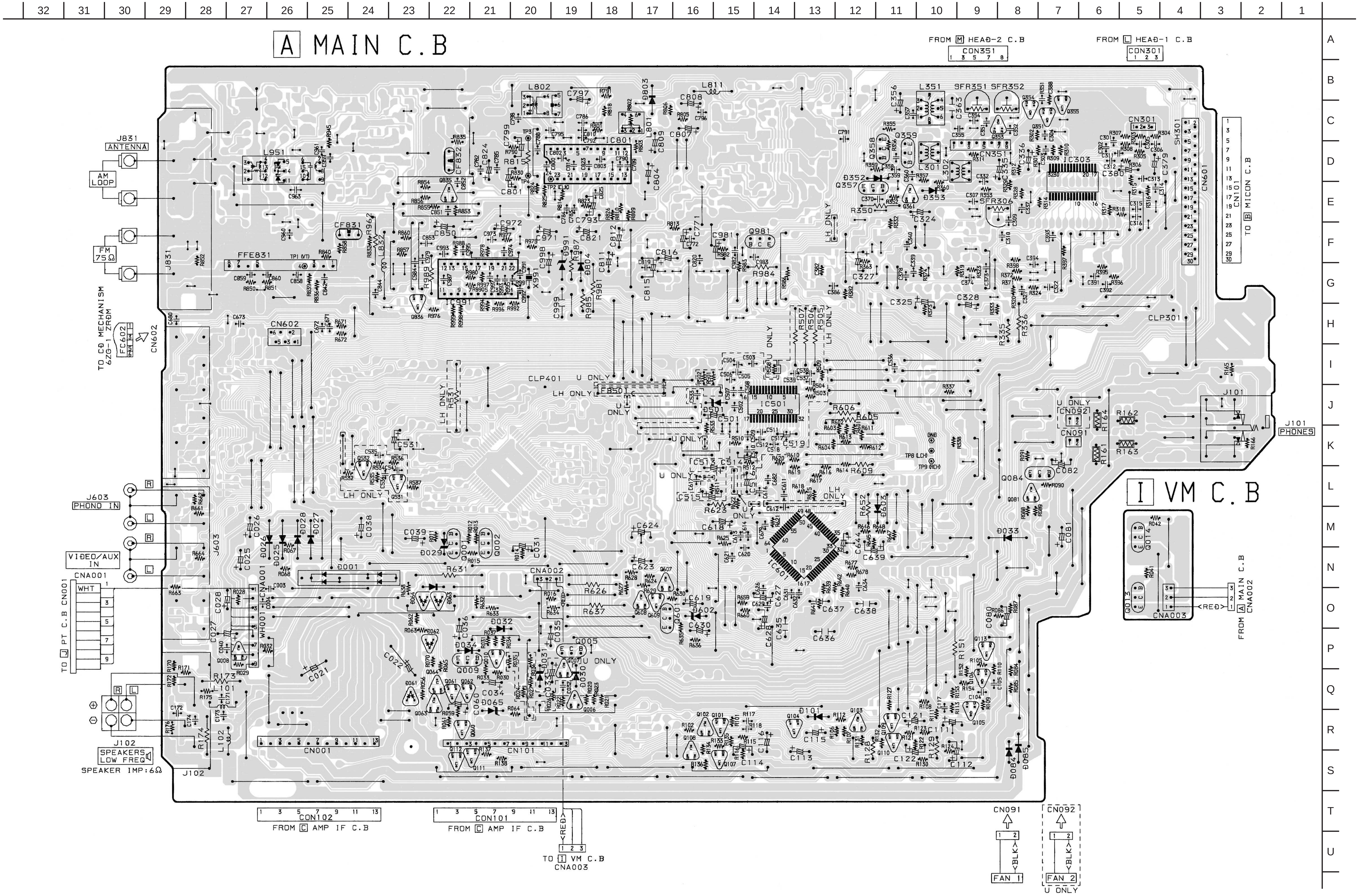
2SA1235
2SC2714
2SC3052
2SD1306
CMBT5401
CMBT5551

KRA102
KRA104
KRA107
KRC102
RT1N141C
RT1P141C

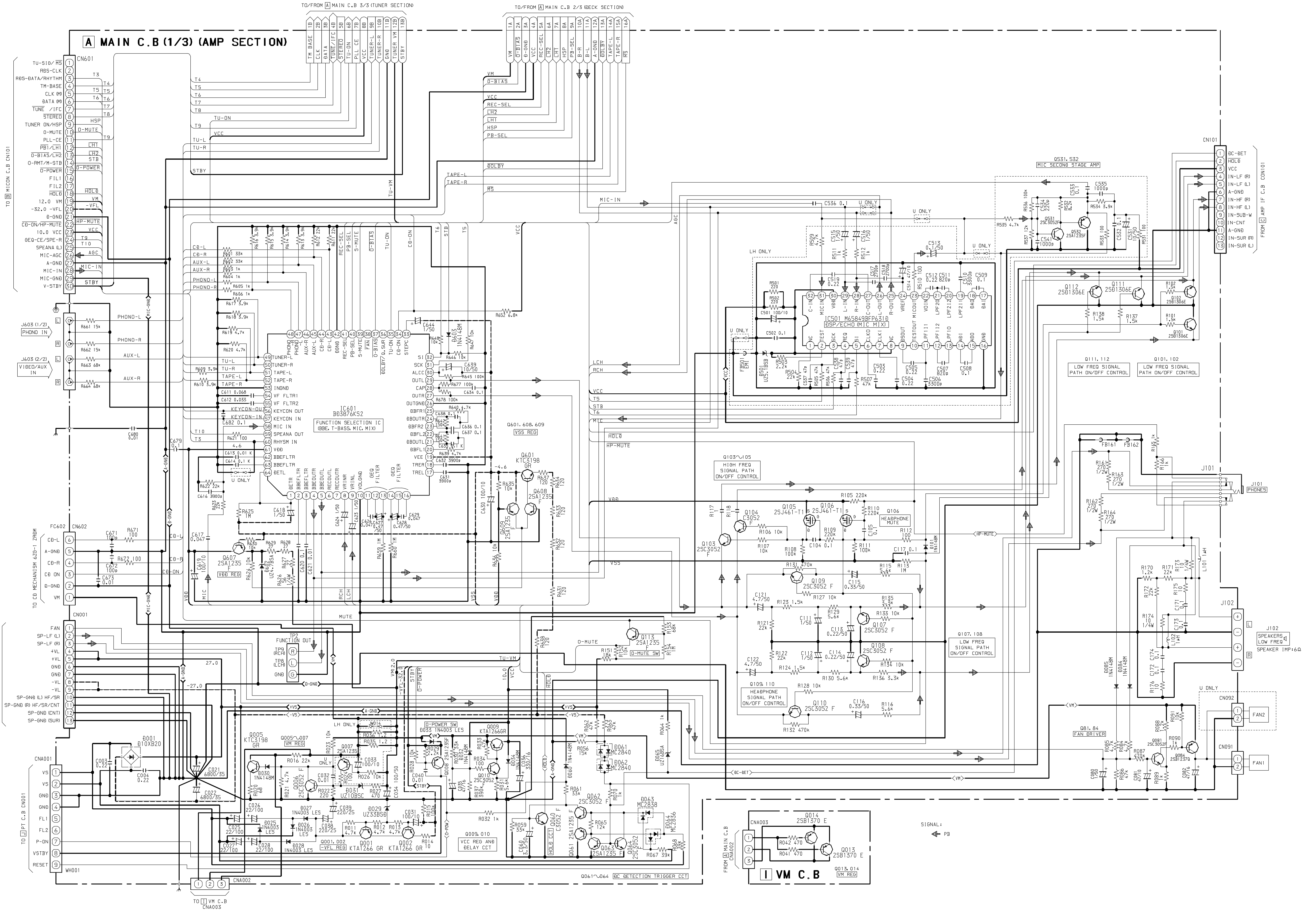


2SJ461-T1
2SK2158

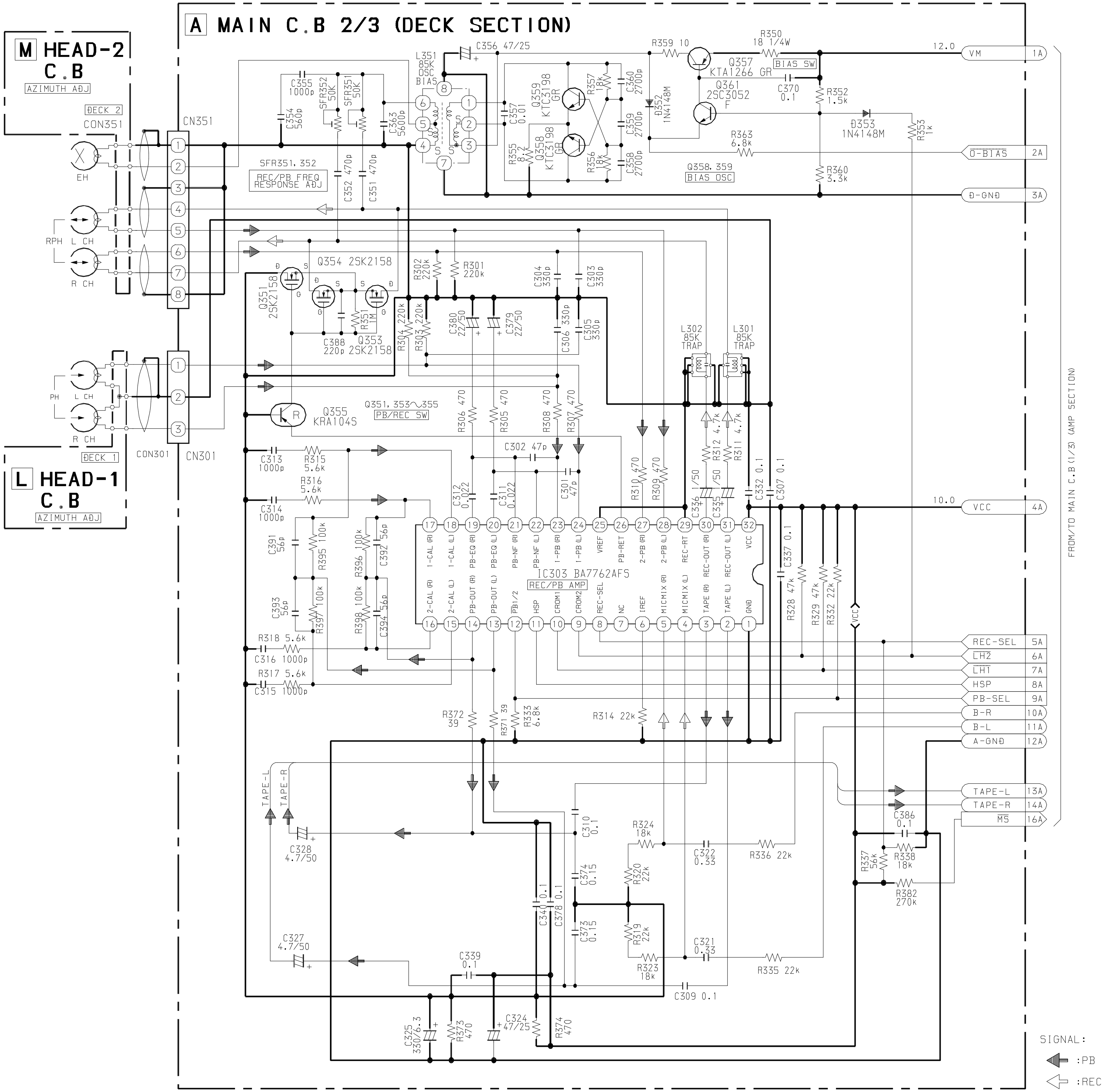
WIRING - 1 (MAIN / VM)


32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1
A B C D E F G H I J K L M N O P Q R S T U
A MAIN C.B
I VM C.B
FROM M HEAD-2 C.B
CON351
FROM L HEAD-1 C.B
CON301
TO B MICON C.B CN101
CN601
J831
ANTENNA
AM LOOP
FM 75Ω
TO CD MECHANISM
CN602
J603
PHONO IN
VIDEO/AUX IN
CNA001
TO J PT C.B CN001
WHT
J102
SPEAKERS LOW FREQ
SPEAKER IMP:6Ω
CN001
CN101
CON102
FROM C AMP IF C.B
CON101
FROM C AMP IF C.B
RED
TO I VM C.B
CNA003
CN091
FAN 1
CN092
FAN 2
U ONLY
BLK
J101
PHONES
IC501
IC601
IC303
IC801
IC991
CLP401
CLP301
FROM A MAIN C.B
CNA002
CNA003

SCHEMATIC DIAGRAM - 1 (MAIN 1 / 3 <AMP> / VM)

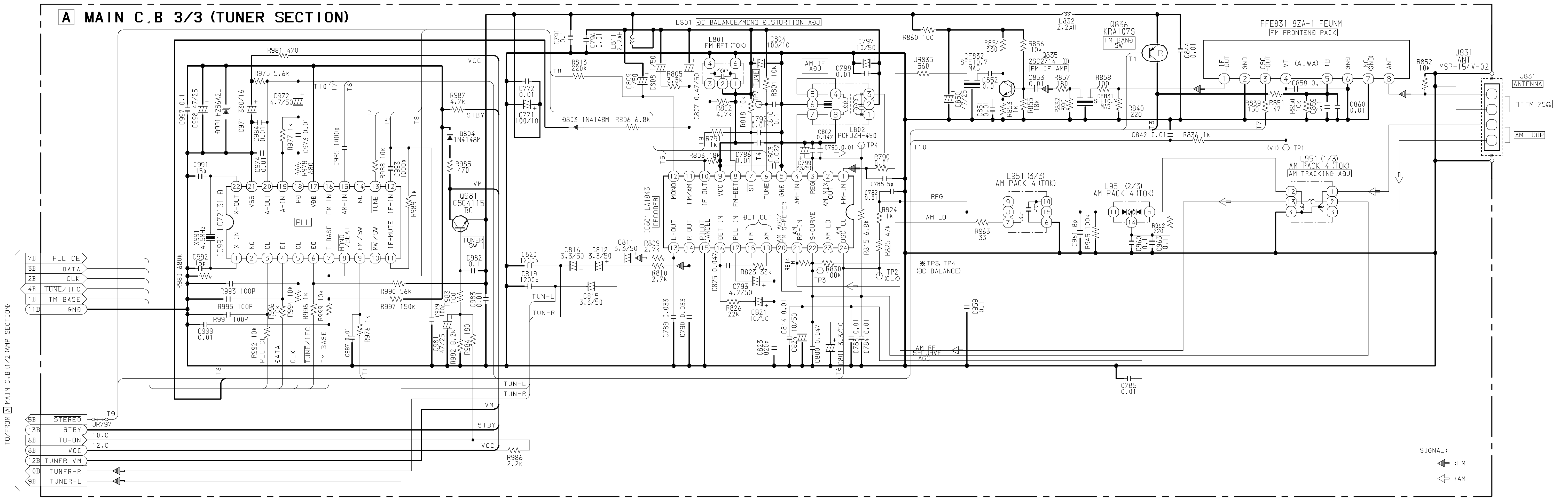

A MAIN C.B (1/3) (AMP SECTION)
TO/FROM A MAIN C.B 3/3 (TUNER SECTION)
TO/FROM A MAIN C.B 2/3 (DECK SECTION)
CN601
TO B MICON C.B CN101
TU-SIO/MS
RDS-CLK
RDS-DATA/RHYTHM
TM-BASE
CLK
DATA
TUNE /IFC
STEREO
TUNER ON/HSP
D-MUTE
PLL-CE
PB1/LH1
D-BIAS/LH2
D-RMT/M-STB
D-POWER
FIL1
FIL2
HOLD
12.0 VM
-32.0 -VFL
D-GND
CD-ON/HP-MUTE
10.0 VCC
GEQ-CE/SPE-R
SPEANA (L)
MIC-AGC
A-GND
MIC-IN
MIC-GND
V-STBY
J603 (1/2) PHONO IN
J603 (2/2) VIDEO/AUX IN
IC601 BD3876KS2
FUNCTION SELECTION IC (BBE, T-BASS, MIC, MIX)
Q601, 608, 609 VSS REG
Q601 KTC3198 GR
Q608 2SA1235 F
Q609 2SA1235 F
Q607 2SA1235 F
VDD REG
TP2 FUNCTION OUT
TP9 (RCH)
TP8 (LCH)
GND
FC602
CN602
TO CD MECHANISM 6ZG-1 ZRDM
CD-L
A-GND
CD-R
CD ON
D-GND
VM
CN001
FROM C AMP IF C.B CN102
FAN
SP-LF (L)
SP-LF (R)
+VL
D-GND
-VL
SP-GND (L) HF/SR
SP-GND (R) HF/SR/CNT
SP-GND (CNT)
SP-GND (SUR)
CNA001
TO J PT C.B CN001
VS
GND
FL1
FL2
P-ON
VSTBY
RESET
WH001
CNA002
TO I VM C.B CNA003
D001 D10XB20
C021 6800/35
C022 6800/35
Q005 KTC3198 GR
Q005∼007 VM REG
Q001, 002 -VFL REG
Q001 KTA1266 GR
Q002 KTA1266 GR
D033 1N4003 LES
D-POWER SW
Q009 KTA1266GR
Q010 2SC3052
Q009, 010 VCC REG AND DELAY CCT
Q060 2SC3052 F
Q061 2SA1235 F
Q062 2SC3052 F
Q063 2SA1235 F
Q064 2SC3052
D061 MC2840
D062 MC2840
D063 MC2838
D064 MC2836
Q061∼064 DC DETECTION TRIGGER CCT
HOLD CCT
Q113 2SA1235 F
D-MUTE SW
Q531, 532 MIC SECOND STAGE AMP
Q531 2SC3052F
Q532 2SA1235F
IC501 M65849BFP631D
DSP/ECHO (MIC MIX)
LH ONLY
U ONLY
Q111 2SD1306E
Q112 2SD1306E
Q101 2SB1306E
Q102 2SB1306E
Q111, 112 LOW FREQ SIGNAL PATH ON/OFF CONTROL
Q101, 102 LOW FREQ SIGNAL PATH ON/OFF CONTROL
CN101
FROM C AMP IF C.B CN101
DC-DET
HOLD
VCC
IN-LF (R)
IN-LF (L)
A-GND
IN-HF (R)
IN-HF (L)
IN-SUB-W
IN-CNT
A-GND
IN-SUR (R)
IN-SUR (L)
Q103∼105 HIGH FREQ SIGNAL PATH ON/OFF CONTROL
Q103 2SC3052 F
Q104 2SC3052 F
Q105 2SJ461-T1
Q106 2SJ461-T1
Q106 HEADPHONE MUTE
Q107 2SC3052 F
Q108 2SC3052 F
Q109 2SC3052 F
Q110 2SC3052 F
Q107, 108 LOW FREQ SIGNAL PATH ON/OFF CONTROL
Q109, 110 HEADPHONE SIGNAL PATH ON/OFF CONTROL
J101
J101 PHONES
J102
J102 SPEAKERS LOW FREQ
SPEAKER IMP:6Ω
L101 1μH
U ONLY
CN092
FAN2
CN091
FAN1
Q81, 84 FAN DRIVER
Q081 2SC3052F
Q084 2SB1237Q
CNA003
FROM A MAIN C.B CNA002
Q014 2SB1370 E
Q013 2SB1370 E
I VM C.B
Q013, 014 VM REG
SIGNAL:
PB

SCHEMATIC DIAGRAM - 2 (MAIN 2 / 3 <DECK> / HEAD - 1 / HEAD - 2)

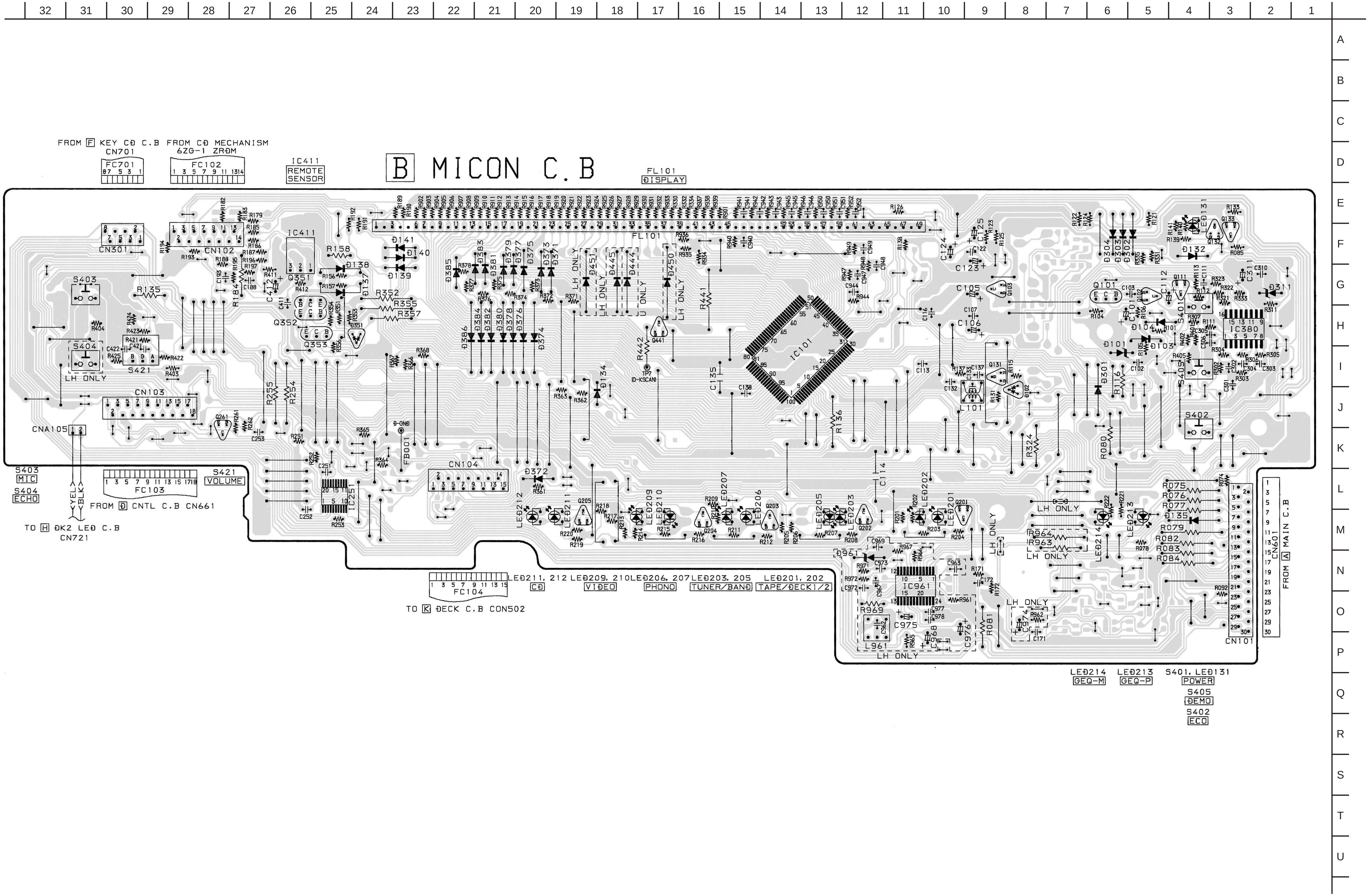


A MAIN C.B 2/3 (DECK SECTION)
M HEAD-2 C.B
AZIMUTH ADJ
DECK 2
CON351
CN351
EH
RPH L CH
R CH
PH L CH
R CH
L HEAD-1 C.B
AZIMUTH ADJ
DECK 1
CON301
CN301
C355 1000p
C354 560p
SFR352 50K
SFR351 50K
C363 5600p
SFR351, 352
REC/PB FREQ RESPONSE ADJ
C352 470p
C351 470p
L351 85K OSC BIAS
C356 47/25
C357 0.01
R355 82
Q358 KTC3198 GR
Q359 KTC3198 GR
R357 18k
R356 18k
C360 2700p
C359 2700p
C358 2700p
D352 1N4148M
R359 10
Q357 KTA1266 GR
Q361 2SC3052 F
R350 18 1/4W
BIAS SW
C370 0.1
R352 1.5k
D353 1N4148M
R353 1k
R363 6.8k
R360 3.3k
Q358, 359
BIAS OSC
12.0
VM 1A
D-BIAS 2A
D-GND 3A
Q354 2SK2158
Q351 2SK2158
C388 220p
Q353 2SK2158
R351 1M
R302 220k
R301 220k
R304 220k
R303 220k
C380 22/50
C379 22/50
C304 330p
C303 330p
C306 330p
C305 330p
L302 85K TRAP
L301 85K TRAP
Q355 KRA104S
Q351, 353~355
PB/REC SW
R306 470
R305 470
R308 470
R307 470
C302 47p
C313 1000p
R315 5.6k
R316 5.6k
C314 1000p
C312 0.022
C311 0.022
C301 47p
R310 470
R309 470
C336 1/50
C335 1/50
R312 4.7k
R311 4.7k
C332 0.1
C307 0.1
10.0
VCC 4A
C391 56p
R395 100k
R396 100k
C392 56p
C393 56p
R397 100k
R398 100k
C394 56p
IC303 BA7762AFS
REC/PB AMP
1-CAL (R)
1-CAL (L)
PB-EQ (R)
PB-EQ (L)
PB-NF (R)
PB-NF (L)
1-PB (R)
1-PB (L)
VREF
PB-RET
2-PB (R)
2-PB (L)
REC-RT
REC-OUT (R)
REC-OUT (L)
VCC
2-CAL (R)
2-CAL (L)
PB-OUT (R)
PB-OUT (L)
PB1/2
HSP
CROM1
CROM2
REC-SEL
NC
IREF
MICMIX (R)
MICMIX (L)
TAPE (R)
TAPE (L)
GND
C337 0.1
R328 47k
R329 47k
R332 22k
VCC
R318 5.6k
C316 1000p
R317 5.6k
C315 1000p
REC-SEL 5A
LH2 6A
LH1 7A
HSP 8A
PB-SEL 9A
B-R 10A
B-L 11A
A-GND 12A
R372 39
R371 39
R333 6.8k
R314 22k
TAPE-L
TAPE-R
C328 4.7/50
C310 0.1
R324 18k
C322 0.33
R336 22k
TAPE-L 13A
TAPE-R 14A
MS 16A
C386 0.1
R337 56k
R338 18k
R382 270k
R320 22k
C374 0.15
C340 0.1
C378 0.1
C373 0.15
R319 22k
R323 18k
C321 0.33
R335 22k
C327 4.7/50
C339 0.1
C309 0.1
C325 330/6.3
R373 470
C324 47/25
R374 470
FROM/TO MAIN C.B(1/3) (AMP SECTION)
SIGNAL:
:PB
:REC

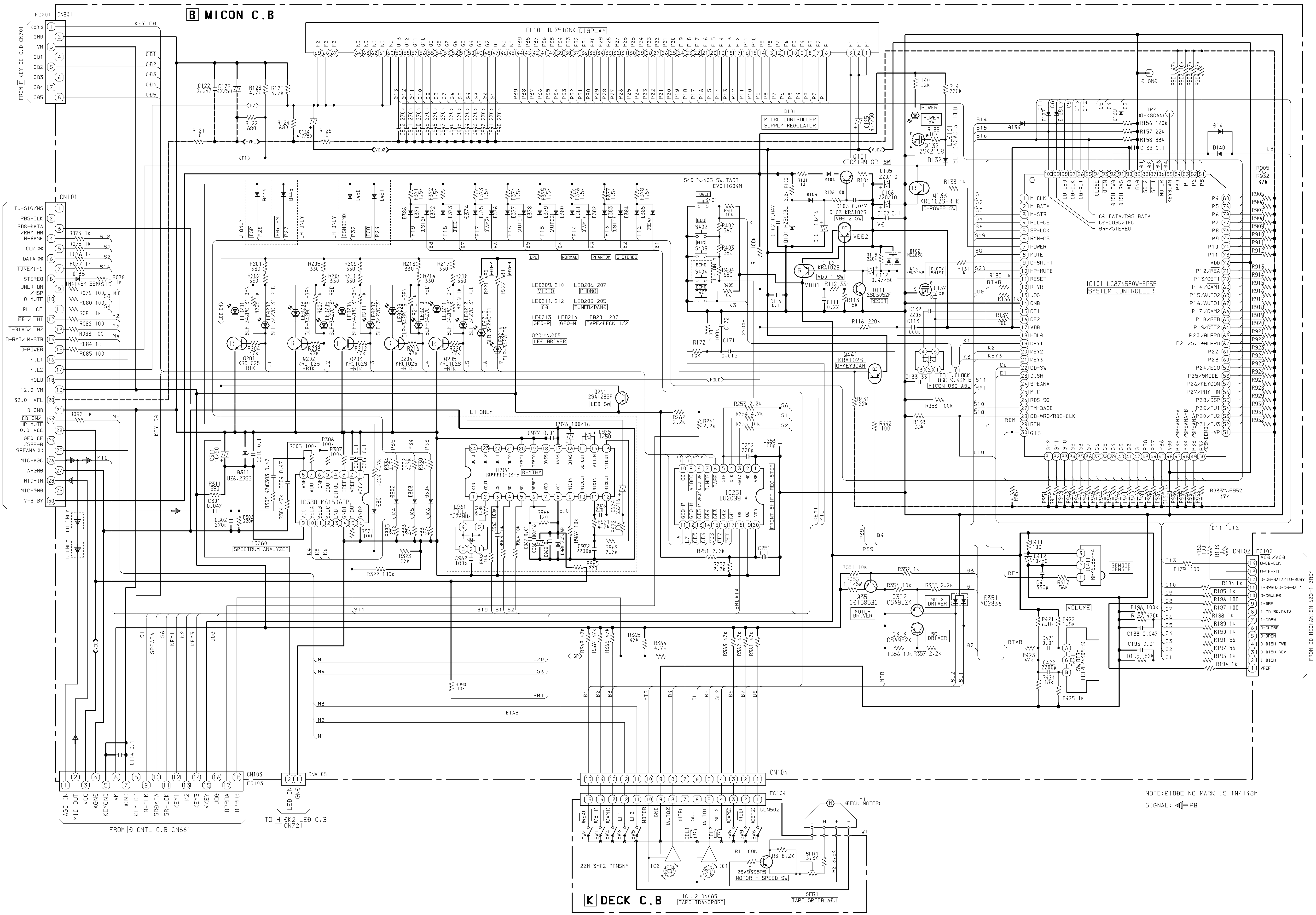
SCHEMATIC DIAGRAM - 3 (MAIN 3 / 3 <TUNER>)

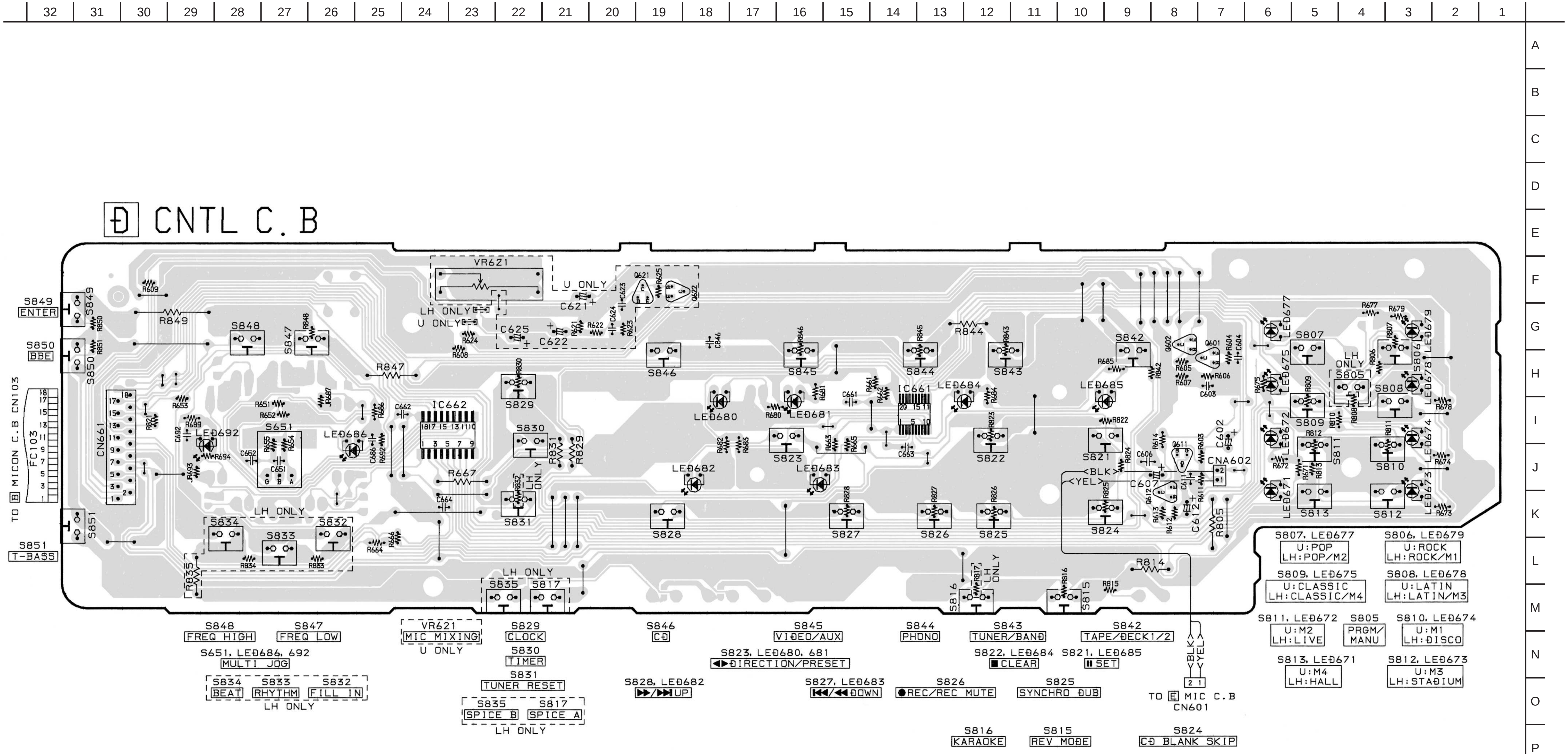

A MAIN C.B 3/3 (TUNER SECTION)
L801 DC BALANCE/MONO DISTORTION ADJ
L801 FM DET (TOK)
L802 PCFJZH-450
AM IF ADJ
IC991 LC72131 D
PLL
IC801 LA1843
DECODER
Q981 CSC4115 BC
TUNER SW
Q835 2SC2714 (O)
FM IF AMP
Q836 KRA107S
FM BAND SW
FFE831 8ZA-1 FEUNM
FM FRONTEND PACK
J831 ANT MSP-154V-02
J831 ANTENNA
FM 75Ω
AM LOOP
L951 (1/3) AM PACK 4 (TOK)
AM TRACKING ADJ
L951 (2/3) AM PACK 4 (TOK)
L951 (3/3) AM PACK 4 (TOK)
X991 4.5MHz
D991 HZS6A2L
D803 1N4148M
D804 1N4148M
CF831 SFE10.7 MA5
CF832 SFE10.7 MA5
TP1 (VT)
TP2 (CLK)
TP3
TP4
※TP3, TP4 (DC BALANCE)
REG
AM LO
AM RF S-CURVE AGC
TUN-L
TUN-R
VCC
VM
STBY
7B PLL CE
3B DATA
2B CLK
4B TUNE/IFC
1B TM BASE
11B GND
5B STEREO
13B STBY
6B TU-ON
8B VCC
12B TUNER VM
10B TUNER-R
9B TUNER-L
JR797
10.0
12.0
R986 2.2k
TO/FROM A MAIN C.B (1/2 AMP SECTION)
SIGNAL:
:FM
:AM

WIRING - 2 (MICON)


B MICON C.B
FROM F KEY CD C.B CN701
FC701
FROM CD MECHANISM 6ZG-1 ZRDM
FC102
IC411 REMOTE SENSOR
FL101 DISPLAY
IC101
IC380
IC961
IC251
CN301
CN102
CN103
CN104
CN101
CNA105
S403 MIC
S404 ECHO
S421 VOLUME
FC103
FROM D CNTL C.B CN661
YEL
BLK
TO H DK2 LED C.B CN721
FC104
TO K DECK C.B CON502
LED211, 212 CD
LED209, 210 VIDEO
LED206, 207 PHONO
LED203, 205 TUNER/BAND
LED201, 202 TAPE/DECK1/2
LED214 GEQ-M
LED213 GEQ-P
S401, LED131 POWER
S405 DEMO
S402 ECO
CN601
FROM A MAIN C.B
LH ONLY
32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1
A B C D E F G H I J K L M N O P Q R S T U

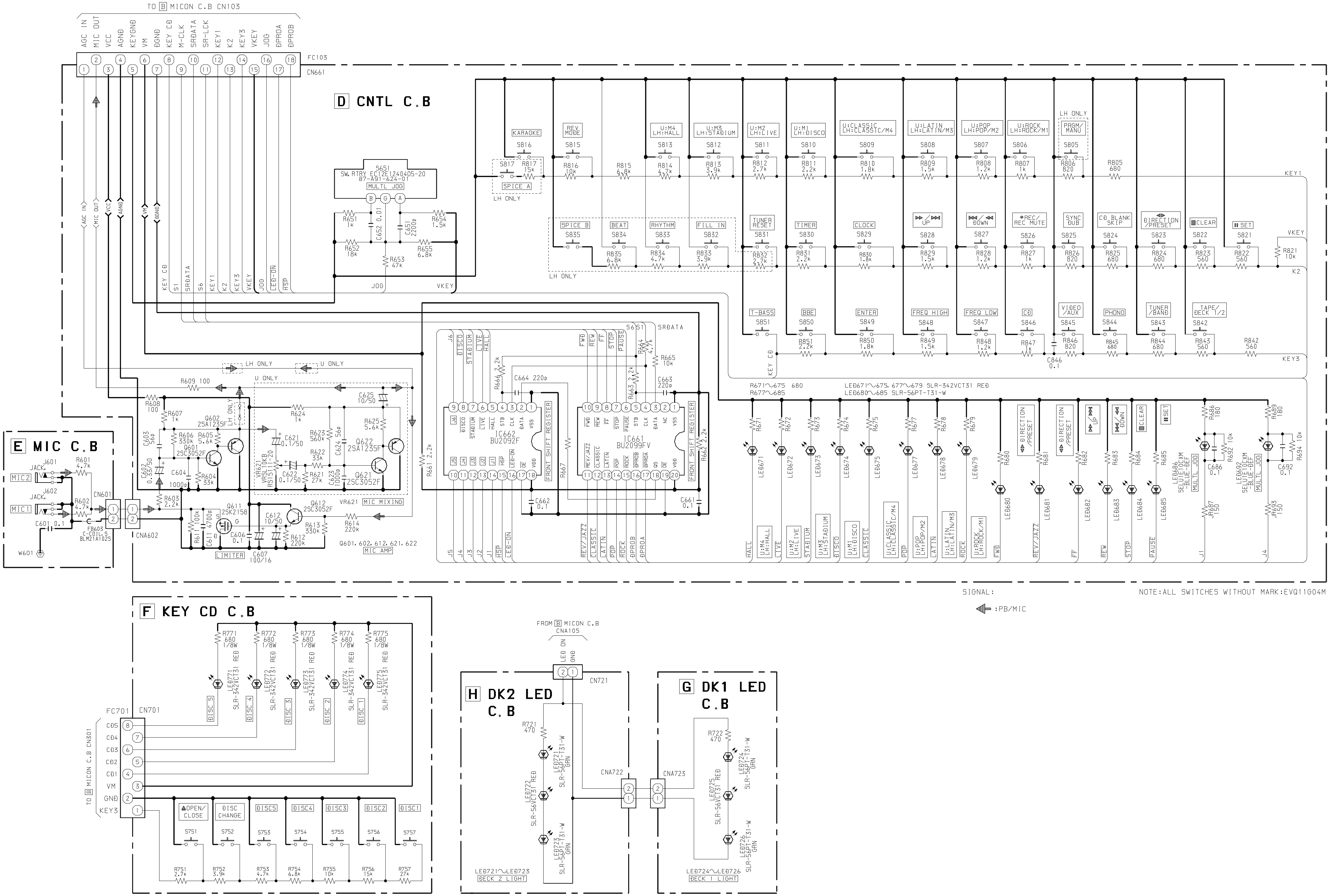
SCHEMATIC DIAGRAM - 4 (MICON / DECK)


B MICON C.B
K DECK C.B
FL101 BJ751GNK DISPLAY
Q101 MICRO CONTROLLER SUPPLY REGULATOR
IC101 LC876580W-5P55 SYSTEM CONTROLLER
IC380 M61506FP SPECTRUM ANALYZER
IC961 BU9990-03FS RHYTHM
IC251 BU2099FV FRONT SHIFT REGISTER
Q201~205 LED DRIVER
Q261 2SA1235F LED SW
Q111 2SC3052F RESET
Q131 2SK2158 CLOCK SHIFT
Q133 KRC102S-RTK D-POWER SW
Q132 2SK2158 POWER SW
Q441 KRA102S D-KEYSCAN
L101 COIL, CLOCK OSC 9.43MHz MICON OSC ADJ
IC441 RPM6938-H4 REMOTE SENSOR
Q351 CD1585BC MOTOR DRIVER
Q352 CSA952K SOL2 DRIVER
Q353 CSA952K SOL1 DRIVER
D351 MC2836
VOLUME
S401~405 SW, TACT EVQ11G04M
CN101 FROM A MAIN C.B CN601
CN301 FROM F KEY CD C.B CN701
CN103 FROM D CNTL C.B CN661
CNA105 TO H DK2 LED C.B CN721
CN102 FROM CD MECHANISM 62G-1 ZRRM
CN104
FC104 CON502
M1 (DECK MOTOR)
2ZM-3MK2 PRN5NM
IC1, 2 BN6851 TAPE TRANSPORT
Q1 25A9335RS MOTOR H-SPEED SW
SFR1 TAPE SPEED ADJ
NOTE:DIODE NO MARK IS 1N4148M
SIGNAL: PB



Ð CNTL C.B
S849 ENTER
S850 BBE
S851 T-BASS
TO B MICON C.B CN103
FC103
CN661
VR621
U ONLY
LH ONLY
IC662
IC661
Q621
Q622
Q601
Q602
Q611
Q612
CNA602
<BLK>
<YEL>
S848 FREQ HIGH
S847 FREQ LOW
VR621 MIC MIXING U ONLY
S829 CLOCK
S830 TIMER
S831 TUNER RESET
S835 SPICE B
S817 SPICE A
LH ONLY
S651, LED686, 692 MULTI JOG
S834 BEAT
S833 RHYTHM
S832 FILL IN
LH ONLY
S846 CD
S828, LED682 ▶▶/▶▶I UP
S845 VIDEO/AUX
S823, LED680, 681 ◀▶DIRECTION/PRESET
S827, LED683 I◀◀/◀◀DOWN
S844 PHONO
S826 ●REC/REC MUTE
S843 TUNER/BAND
S822, LED684 ■CLEAR
S825 SYNCHRO DUB
S842 TAPE/DECK1/2
S821, LED685 II SET
S816 KARAOKE
S815 REV MODE
S824 CD BLANK SKIP
TO E MIC C.B CN601
S807, LED677 U:POP LH:POP/M2
S806, LED679 U:ROCK LH:ROCK/M1
S809, LED675 U:CLASSIC LH:CLASSIC/M4
S808, LED678 U:LATIN LH:LATIN/M3
S811, LED672 U:M2 LH:LIVE
S805 PRGM/MANU
S810, LED674 U:M1 LH:DISCO
S813, LED671 U:M4 LH:HALL
S812, LED673 U:M3 LH:STADIUM

SCHEMATIC DIAGRAM - 5 (CNTL / MIC / KEY CD / DK1 LED / DK2 LED)



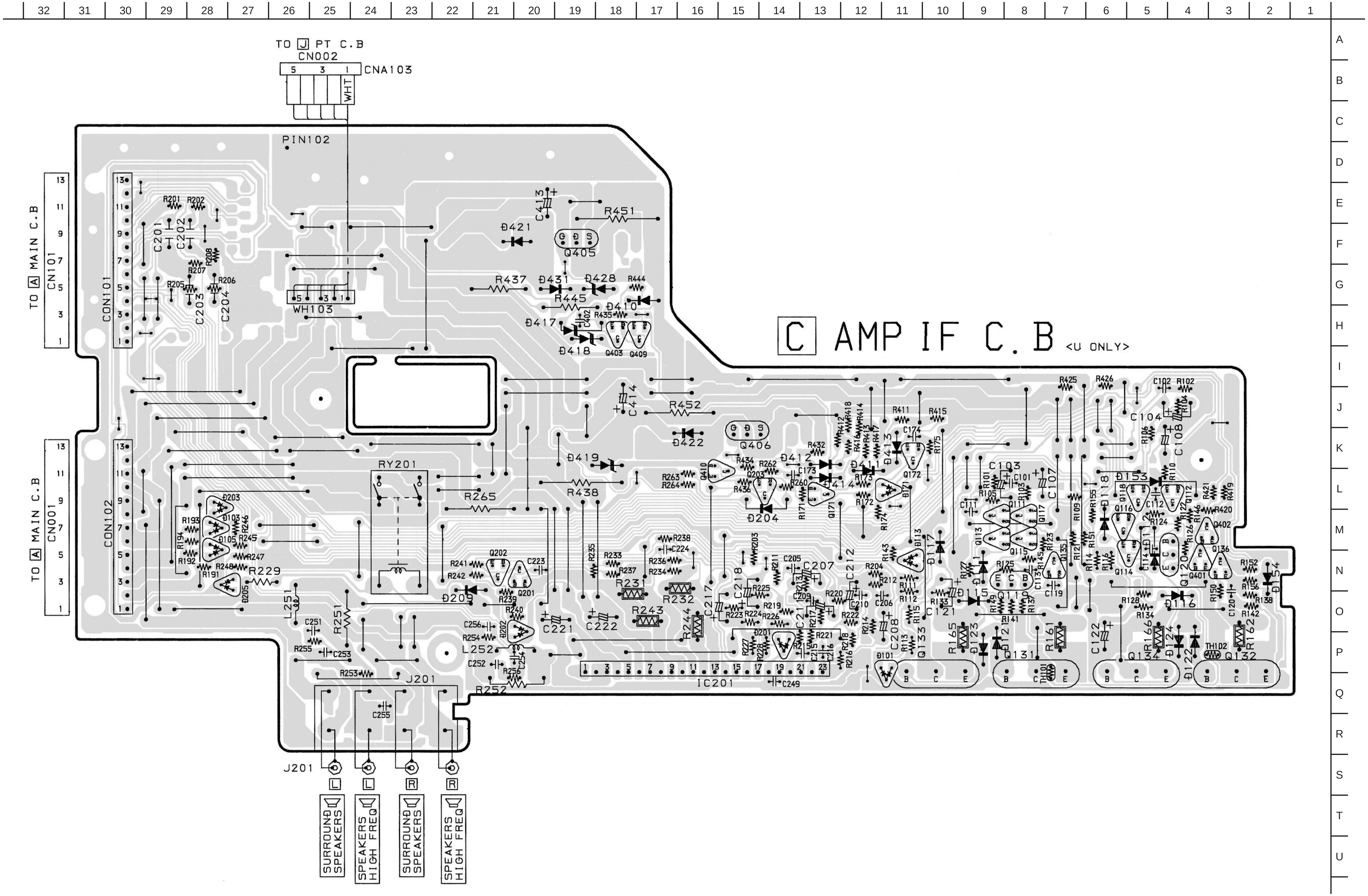
TO B MICON C.B CN103
AGC IN
MIC OUT
VCC
AGND
KEYGND
VM
DGND
KEY CD
M-CLK
SRDATA
SR-LCK
KEY1
K2
KEY3
VKEY
JOG
DPROA
DPROB
FC103
CN661
D CNTL C.B
S651
SW. RTRY EC12E1240405-20
87-A91-624-01
MULTI JOG
KARAOKE
S816
S817
R817 15k
SPICE A
LH ONLY
REV MODE
S815
R816 10k
R815 6.8k
U:M4 LH:HALL
S813
R814 4.7k
U:M3 LH:STADIUM
S812
R813 3.9k
U:M2 LH:LIVE
S811
R812 2.7k
U:M1 LH:DISCO
S810
R811 2.2k
U:CLASSIC LH:CLASSIC/M4
S809
R810 1.8k
U:LATIN LH:LATIN/M3
S808
R809 1.5k
U:POP LH:POP/M2
S807
R808 1.2k
U:ROCK LH:ROCK/M1
S806
R807 1k
LH ONLY
PRGM/ MANU
S805
R806 820
R805 680
KEY1
SPICE B
S835
BEAT
S834
R835 6.8k
RHYTHM
S833
R834 4.7k
FILL IN
S832
R833 3.9k
TUNER RESET
S831
R832 2.7k
TIMER
S830
R831 2.2k
CLOCK
S829
R830 1.8k
UP
S828
R829 1.5k
DOWN
S827
R828 1.2k
REC/ REC MUTE
S826
R827 1k
SYNC DUB
S825
R826 820
CD BLANK SKIP
S824
R825 680
DIRECTION /PRESET
S823
R824 680
CLEAR
S822
R823 560
SET
S821
R822 560
R821 10k
VKEY
K2
T-BASS
S851
BBE
S850
R851 2.2k
ENTER
S849
R850 1.8k
FREQ HIGH
S848
R849 1.5k
FREQ LOW
S847
R848 1.2k
CD
S846
R847 1k
C846 0.1
VIDEO /AUX
S845
R846 820
PHONO
S844
R845 680
TUNER /BAND
S843
R844 680
TAPE/ DECK 1/2
S842
R843 560
R842 560
KEY3
R651 1k
C652 0.01
C651 2200p
R654 1.5k
R652 18k
R653 47k
R655 6.8k
JOG
VKEY
LH ONLY
U ONLY
R609 100
R608 100
R607 1k
Q602 2SA1235F
R606 330k
R605 5.6k
Q601 2SC3052F
C603 56p
C602 0.33/50
C604 1000p
R604 33k
R603 2.2k
R611 100k
C611 4700p
Q611 2SK2158
C606 0.1
C607 100/16
LIMITER
C612 10/50
Q612 2SC3052F
R613 330k
R612 220k
R614 220k
VR621 MIC MIXING
Q601, 602, 612, 621, 622
MIC AMP
R624 1k
C621 0.1/50
R623 560k
C624 56p
R625 5.6k
C625 10/50
Q622 2SA1235F
R622 33k
VR621 10KB VRSL1K-20
C622 0.1/50
R621 27k
C623 1000p
Q621 2SC3052F
E MIC C.B
J601 JACK
MIC2
R601 4.7k
J602 JACK
MIC1
R602 4.7k
CN601
CNA602
FB603 C-COIL.S BLM21A102S
C601 0.1
W601
IC662 BU2092F
FRONT SHIFT REGISTER
C664 220p
R666 2.2k
C662 0.1
R667
R661 2.2k
IC661 BU2099FV
R664 4.7k
R665 10k
R663 2.2k
C663 220p
R662 2.2k
C661 0.1
S6 S1 SRDATA
J5 J4 J3 J2 J1 HSP LED-ON
REV/JAZZ CLASSIC LATIN POP ROCK DPROB DPROA
R671~675 680
R677~685
LED671~675, 677~679 SLR-342VCT31 RED
LED680~685 SLR-56PT-T31-W
LED671 LED672 LED673 LED674 LED675 LED677 LED678 LED679
LED680 LED681 LED682 LED683 LED684 LED685
LED686 SEL1E10CXM -BLUE-BEF
MULTI JOG
R686 180
R692 10k
C686 0.1
JR687 150
LED692 SEL1E10CXM -BLUE-BEF
R689 180
R694 10k
C692 0.1
JR693 150
HALL
U:M4 LH:HALL
LIVE
U:M2 LH:LIVE
STADIUM
U:M3 LH:STADIUM
DISCO
U:M1 LH:DISCO
CLASSIC
U:CLASSIC LH:CLASSIC/M4
POP
U:POP LH:POP/M2
LATIN
U:LATIN LH:LATIN/M3
ROCK
U:ROCK LH:ROCK/M1
FWD
REV/JAZZ
FF
REW
STOP
PAUSE
J1
J4
F KEY CD C.B
R771 680 1/8W
R772 680 1/8W
R773 680 1/8W
R774 680 1/8W
R775 680 1/8W
LED771 SLR-342VCT31 RED
LED772 SLR-342VCT31 RED
LED773 SLR-342VCT31 RED
LED774 SLR-342VCT31 RED
LED775 SLR-342VCT31 RED
DISC 5
DISC 4
DISC 3
DISC 2
DISC 1
FC701
CN701
TO B MICON C.B CN301
CD5 CD4 CD3 CD2 CD1 VM GND KEY3
OPEN/ CLOSE
DISC CHANGE
DISC5 DISC4 DISC3 DISC2 DISC1
S751 S752 S753 S754 S755 S756 S757
R751 2.7k
R752 3.9k
R753 4.7k
R754 6.8k
R755 10k
R756 15k
R757 27k
FROM B MICON C.B CNA105
LED ON
GND
CN721
H DK2 LED C.B
R721 470
LED721 SLR-56PT-T31-W GRN
LED722 SLR-56VC131 RED
LED723 SLR-56PT-T31-W GRN
CNA722
LED721~LED723
DECK 2 LIGHT
G DK1 LED C.B
CNA723
R722 470
LED724 SLR-56PT-T31-W GRN
LED725 SLR-56VC131 RED
LED726 SLR-56PT-T31-W GRN
LED724~LED726
DECK 1 LIGHT

SIGNAL:

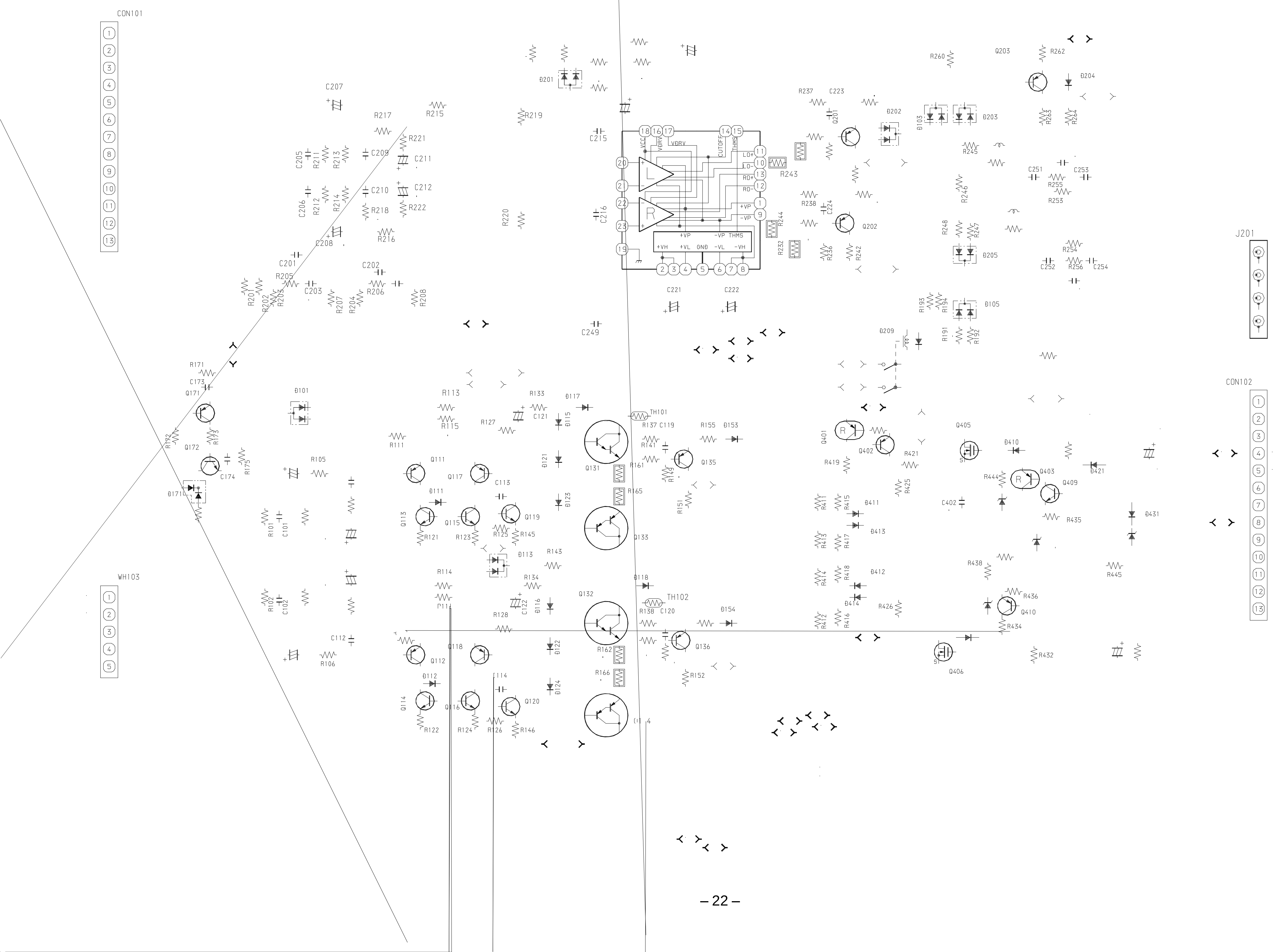
⇐ :PB/MIC

NOTE:ALL SWITCHES WITHOUT MARK:EVQ11G04M

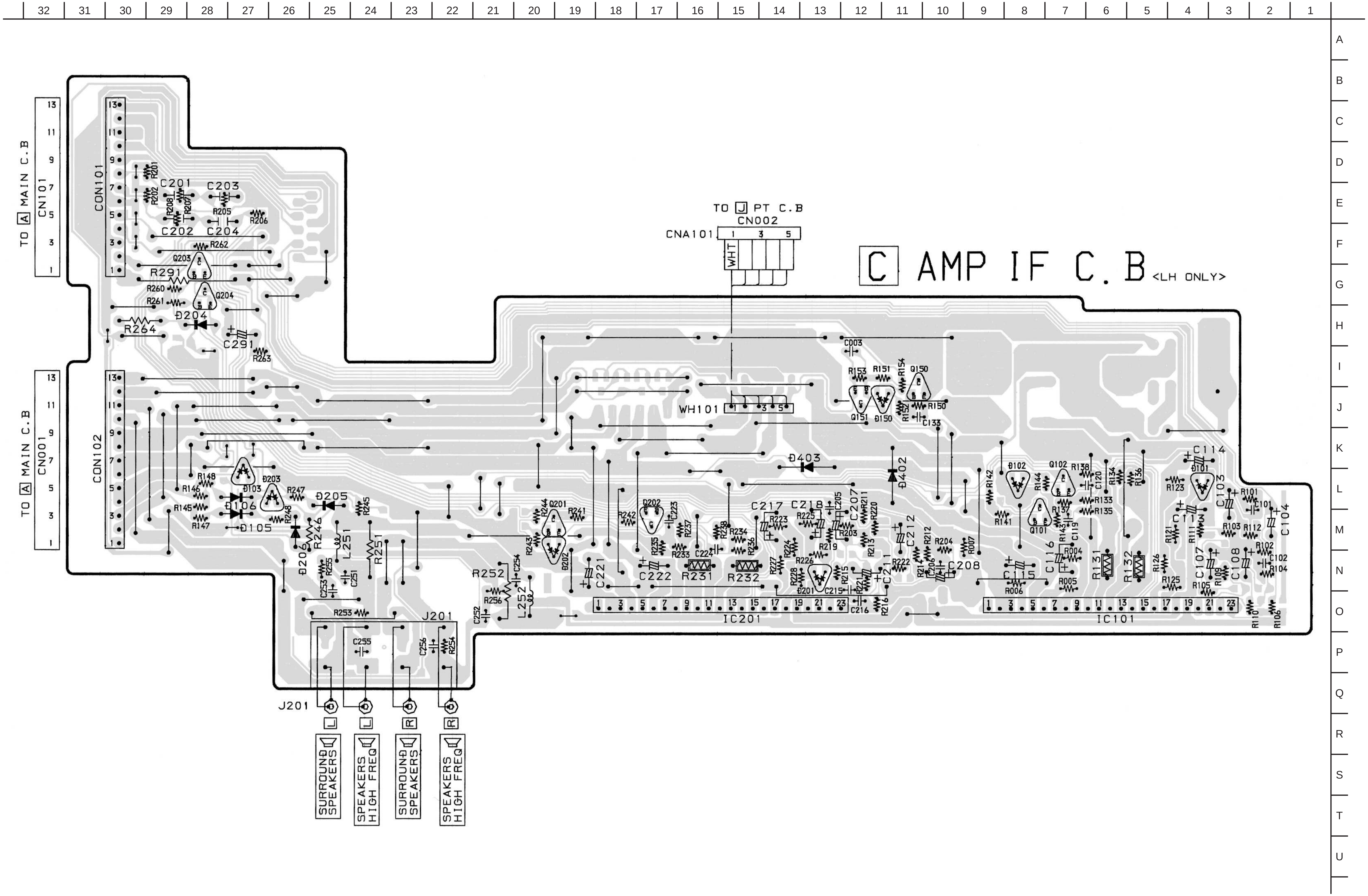
WIRING - 4 (U : AMP IF)


32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1
A B C D E F G H I J K L M N O P Q R S T U
TO J PT C.B
CN002
CNA103
WHT
PIN102
TO A MAIN C.B
CN101
CON101
CN001
CON102
WH103
C AMP IF C.B <U ONLY>
RY201
IC201
J201
L
R
SURROUND SPEAKERS
SPEAKERS HIGH FREQ
Q405
Q406
Q403
Q409
R451
R437
R445
R452
R438
R265
R229
R251
R252
L251
L252
D421
D431
D428
D410
D417
D418
D419
D422
D204
D209
C413
C414
C221
C222
C217
C218
C207
C212
C208
C201
C202
C203
C204
C103
C104
C107
C108
C121
C122
R231
R232
R243
R244
R161
R162
R165
R166
Q131
Q132
Q133
Q134
Q120
Q101
B C E
TH101
TH102

SCHEMATIC DIAGRAM - 6 (U : AMP IF)

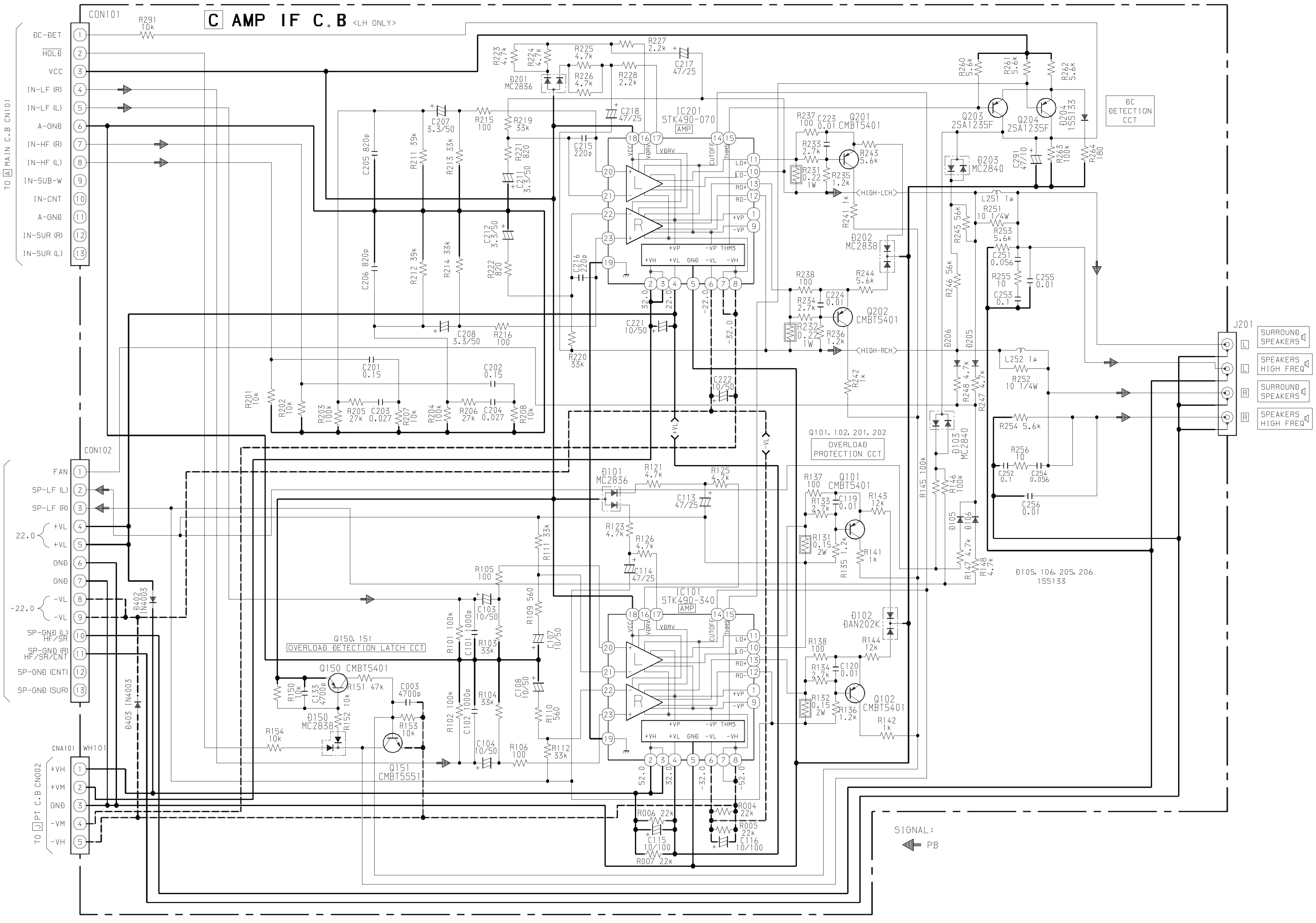

CON101
1
2
3
4
5
6
7
8
9
10
11
12
13
C207
R217
R215
R219
D201
C215
R221
C211
C209
C205
R211
R213
C210
C212
C206
R212
R214
R218
R222
R216
C208
R220
C216
C201
C202
R205
C203
R206
R201
R202
R203
R207
R204
R208
C249
VCC
VBRV
VDRV
CUTOFF
THMS
LD+
LD-
RD+
RD-
+VP
-VP
-VP THMS
+VH
+VL
GND
-VL
-VH
L
R
R243
R244
R232
C221
C222
R237
C223
Q201
D202
R238
C224
Q202
R236
R242
R260
Q203
R262
D204
D103
D203
R263
R264
R245
C251
C253
R255
R253
R246
R248
R247
D205
R254
C252
R256
C254
R193
R194
D105
R191
R192
D209
J201
CON102
1
2
3
4
5
6
7
8
9
10
11
12
13
R171
C173
Q171
D101
R172
R173
Q172
C174
R175
D171
R105
R113
R133
D117
TH101
R115
R127
C121
D115
R111
Q111
Q117
R137
C119
R155
D153
R141
Q131
R161
R149
Q135
D111
C113
D121
R165
R151
Q113
Q115
Q119
D123
R121
R123
R125
R145
Q133
R101
C101
D113
R143
R114
R134
D118
TH102
R102
C102
R128
C122
D116
Q132
R138
C120
D154
C112
Q118
D122
R162
Q136
R106
Q112
R166
D112
C114
D124
R152
Q114
Q116
Q120
R122
R124
R126
R146
WH103
1
2
3
4
5
Q401
R
Q402
R419
R421
Q405
D410
R425
Q403
R444
Q409
D421
R411
R415
D411
C402
R435
D431
R413
R417
D413
R438
R445
R414
R418
D412
R436
D414
R426
Q410
R412
R416
R434
Q406
R432

WIRING - 5 (LH : AMP IF)

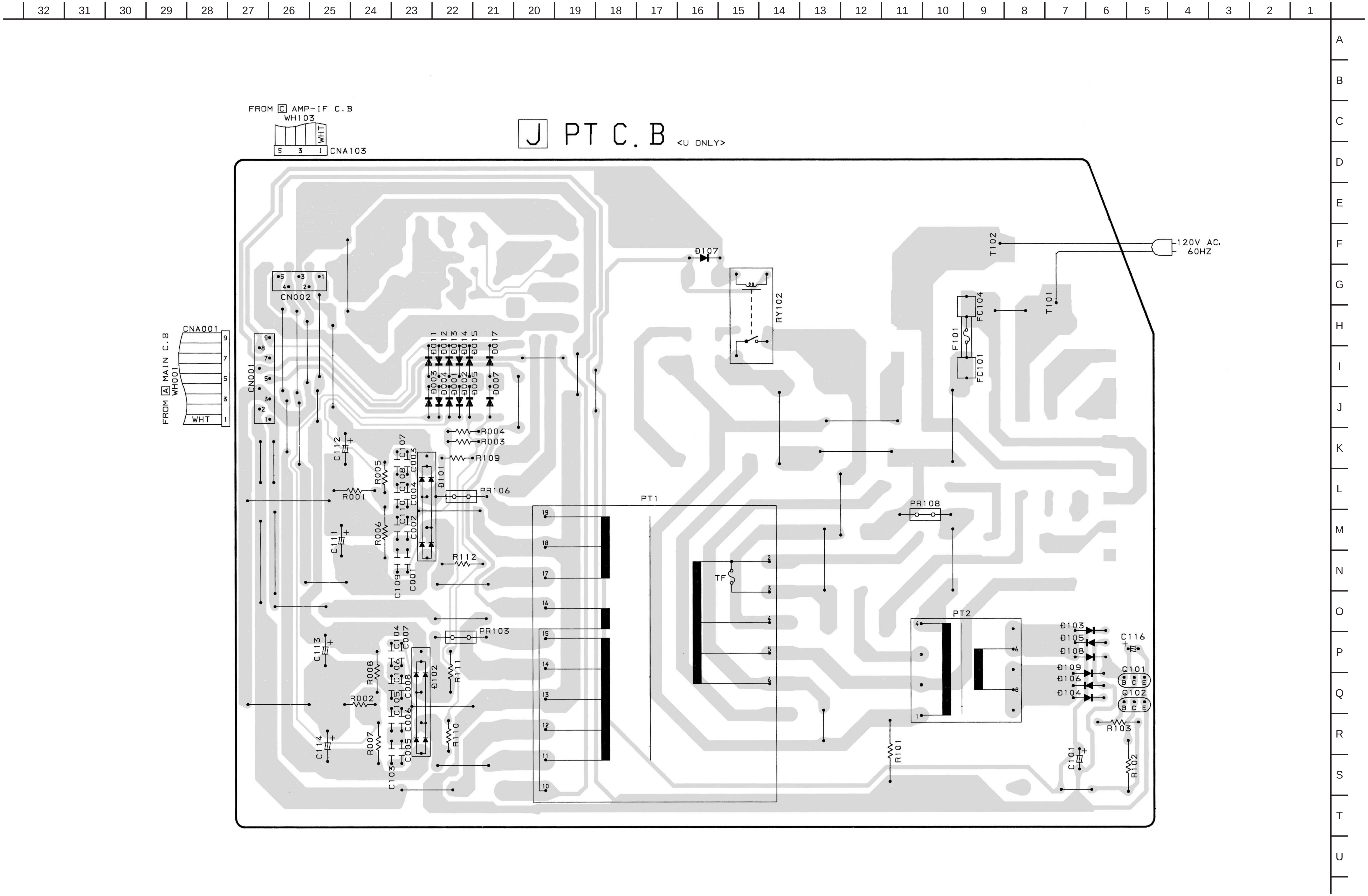


C AMP IF C.B <LH ONLY>
TO A MAIN C.B CN101
TO A MAIN C.B CN001
CON101
CON102
TO J PT C.B
CN002
CNA101
WHT
WH101
IC201
IC101
J201
L
R
SURROUND SPEAKERS
SPEAKERS HIGH FREQ
Q201
Q202
Q203
Q204
Q101
Q102
Q150
Q151
D101
D102
D103
D105
D106
D150
D201
D202
D203
D204
D205
D206
D402
D403
L251
L252
C201
C202
C203
C204
C291
C217
C218
C221
C222
C003
C114
C116
C103
C104
C107
C108
R231
R232
R131
R132
R252
R251
R264
R291

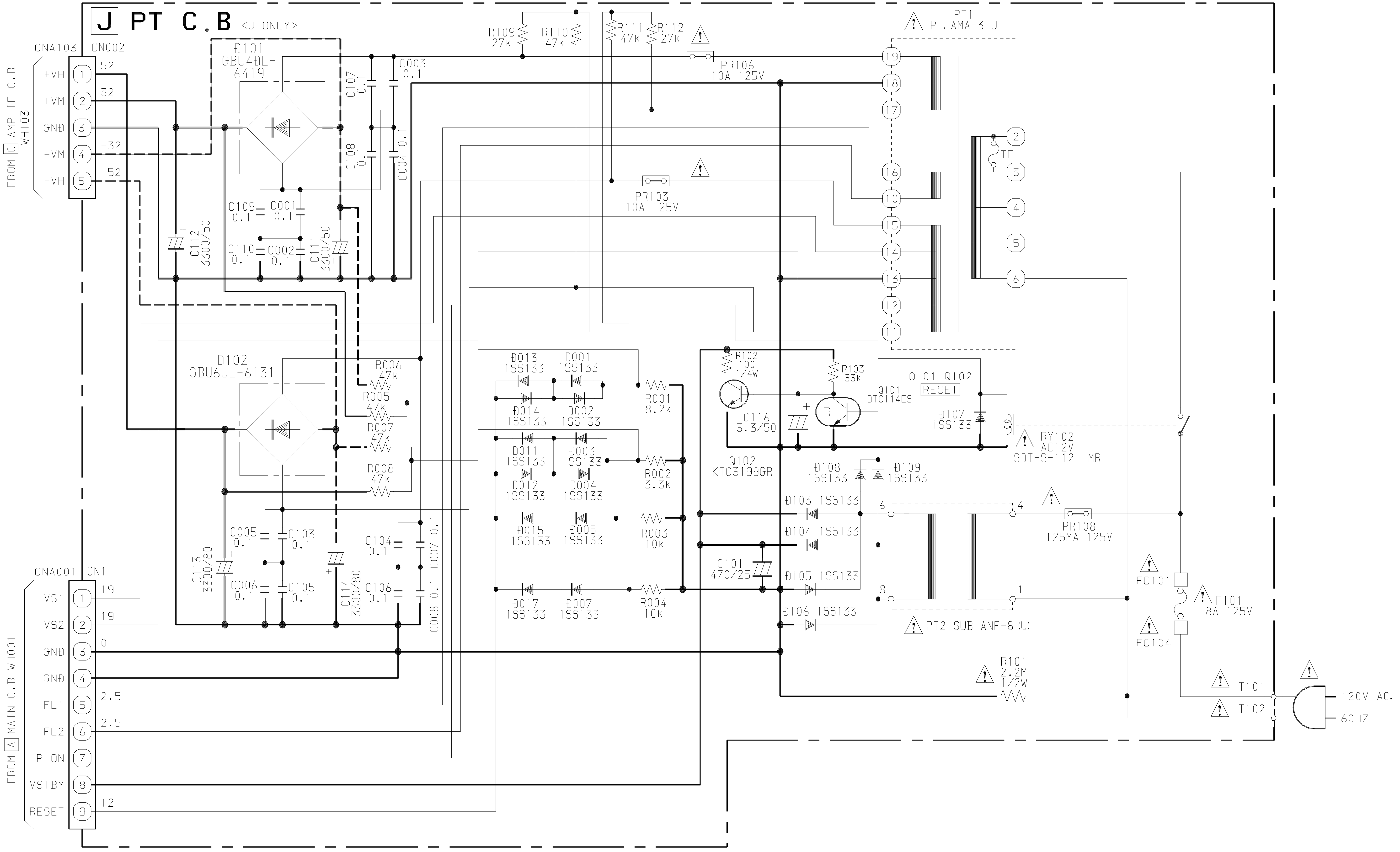
SCHEMATIC DIAGRAM - 7 (LH : AMP IF)


C AMP IF C.B <LH ONLY>
CON101
TO A MAIN C.B CN101
DC-DET
HOLD
VCC
IN-LF (R)
IN-LF (L)
A-GND
IN-HF (R)
IN-HF (L)
IN-SUB-W
IN-CNT
A-GND
IN-SUR (R)
IN-SUR (L)
R291 10k
IC201 STK490-070 AMP
IC101 STK490-340 AMP
VCC VDRV CUTOFF THMS
LO+ LO- RO+ RO- +VP -VP
+VP -VP THMS
+VH +VL GND -VL -VH
D201 MC2836
D101 MC2836
D202 MC2838
D203 MC2840
D103 MC2840
D102 DAN202K
D204 1SS133
D105, 106, 205, 206 1SS133
Q201 CMBT5401
Q202 CMBT5401
Q101 CMBT5401
Q102 CMBT5401
Q203 2SA1235F
Q204 2SA1235F
Q150 CMBT5401
Q151 CMBT5551
D150 MC2838
Q150, 151 OVERLOAD DETECTION LATCH CCT
Q101, 102, 201, 202 OVERLOAD PROTECTION CCT
DC DETECTION CCT
HIGH-LCH
HIGH-RCH
+VL
-VL
J201
SURROUND SPEAKERS L
SPEAKERS HIGH FREQ L
SURROUND SPEAKERS R
SPEAKERS HIGH FREQ R
L251 1μ
L252 1μ
R251 10 1/4W
R252 10 1/4W
CON102
TO A MAIN C.B CN001
FAN
SP-LF (L)
SP-LF (R)
+VL
+VL
22.0
GND
GND
-VL
-VL
-22.0
SP-GND (L) HF/SR
SP-GND (R) HF/SR/CNT
SP-GND (CNT)
SP-GND (SUR)
D402 1N4003
D403 1N4003
CNA101 WH101
TO J PT C.B CN002
+VH
+VM
GND
-VM
-VH
R006 22k
R007 22k
R004 22k
R005 22k
C115 10/100
C116 10/100
52.0
32.0
-32.0
-52.0
22.0
-22.0
SIGNAL:
PB

WIRING - 6 (U : PT)

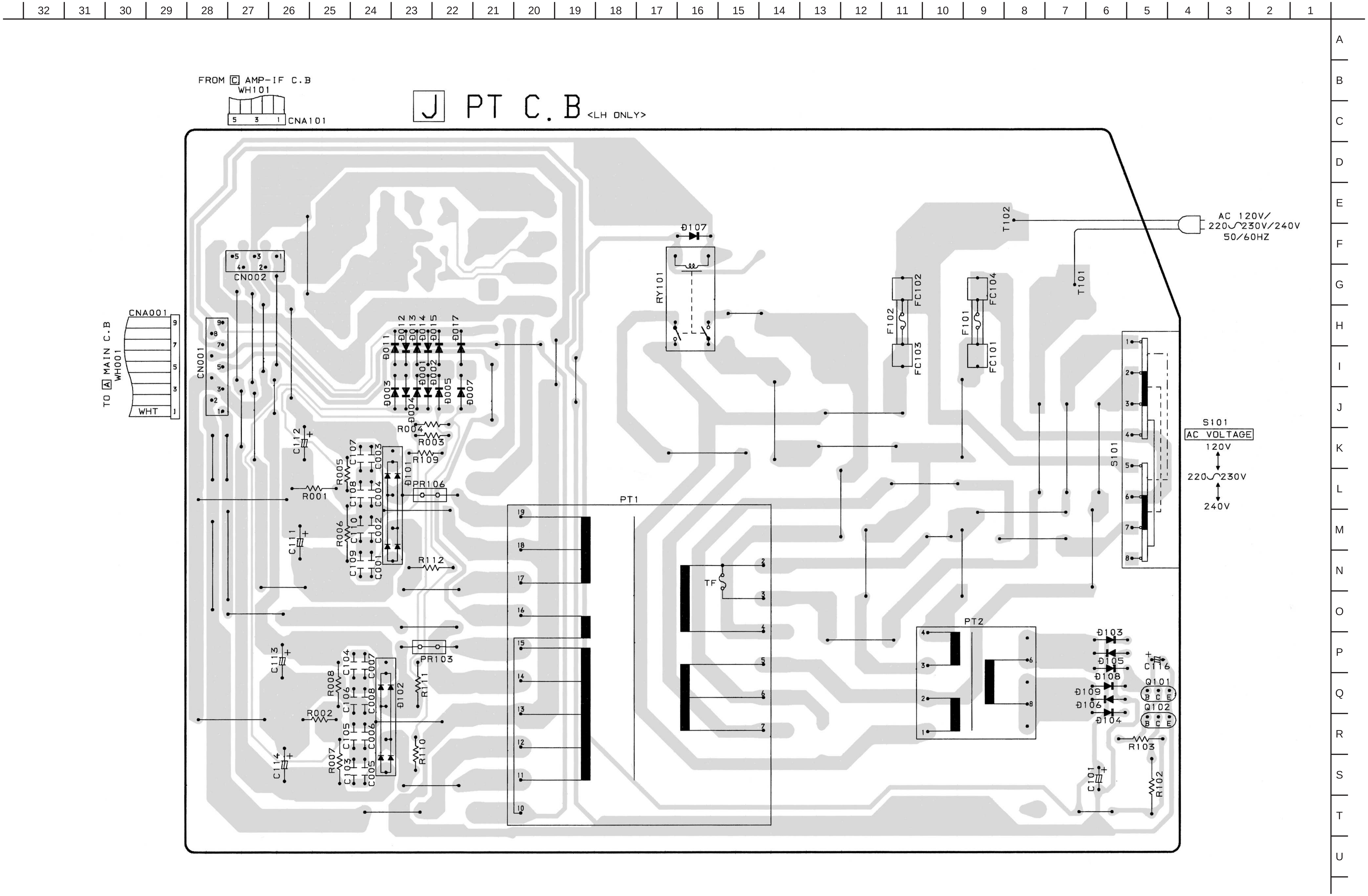

32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1
A B C D E F G H I J K L M N O P Q R S T U
J PT C.B <U ONLY>
FROM C AMP-IF C.B
WH103
WHT
5 3 1
CNA103
FROM A MAIN C.B
WH001
CNA001
WHT
9 7 5 3 1
CN001
CN002
D107
RY102
T102
T101
120V AC. 60HZ
FC104
F101
FC101
D011 D012 D013 D014 D015 D017
D003 D004 D001 D002 D005 D007
R004
R003
R109
D101
PR106
C112
R005
C107
C003
C108
C004
C110
C002
R001
C111
R006
R112
C109
C001
PT1
19 18 17 16 15 14 13 12 11 10
TF
2 3 4 5 6
PR108
C113
C104
C007
R008
C106
D102
R111
PR103
R002
C105
C008
C114
R007
C006
C005
R110
C103
R101
PT2
4 1 6 8
D103
D105
D108
D109
D106
D104
C116
Q101
Q102
B C E
R103
C101
R102

SCHEMATIC DIAGRAM - 8 (U : PT)

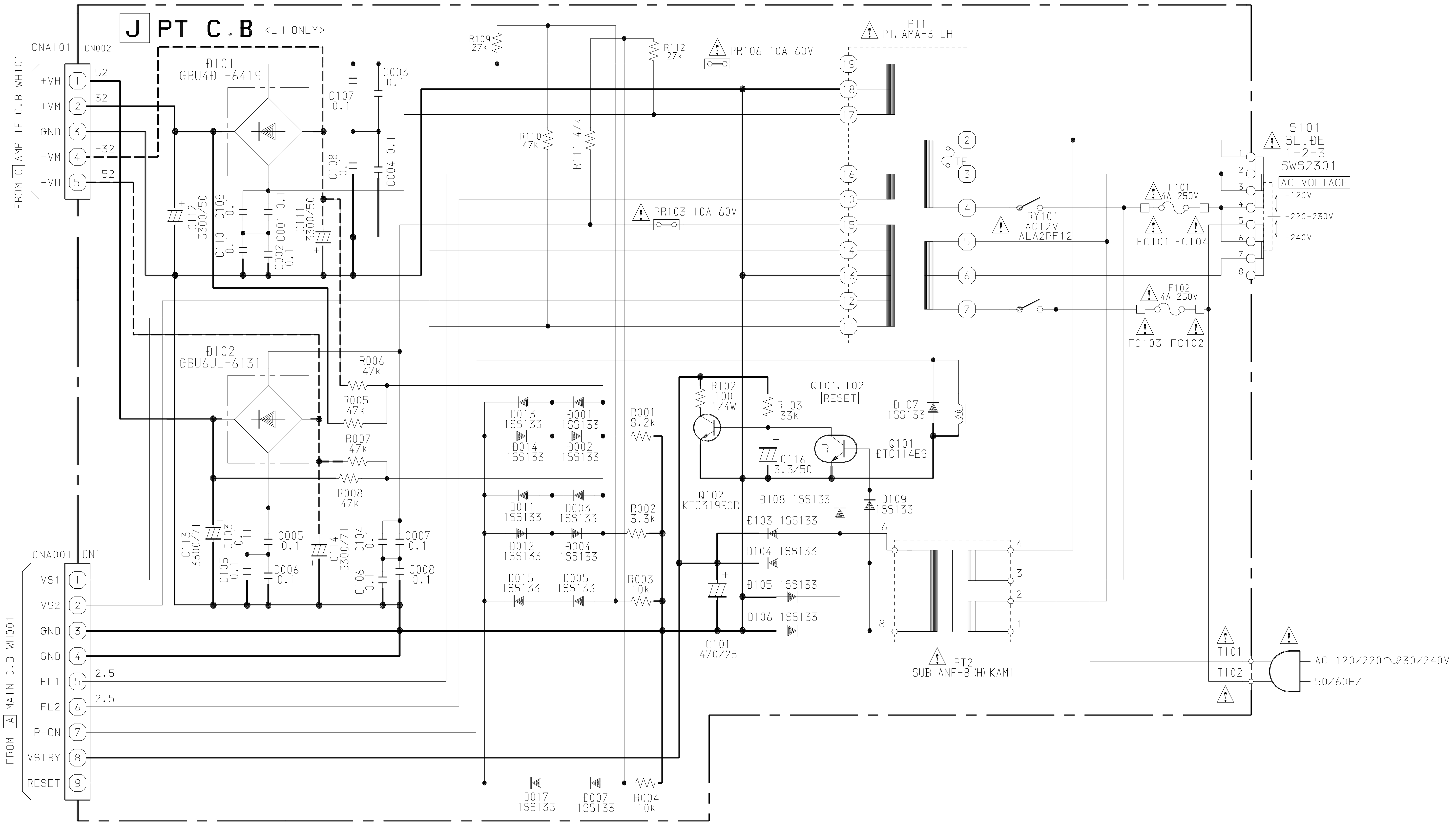


J PT C.B <U ONLY>
CNA103
CN002
FROM C AMP IF C.B WH103
+VH
+VM
GND
-VM
-VH
52
32
-32
-52
D101
GBU4DL-6419
C107 0.1
C003 0.1
C108 0.1
C004 0.1
C109 0.1
C001 0.1
C110 0.1
C002 0.1
C111 3300/50
C112 3300/50
R109 27k
R110 47k
R111 47k
R112 27k
PR106 10A 125V
PR103 10A 125V
PT1 PT, AMA-3 U
TF
D102
GBU6JL-6131
R006 47k
R005 47k
R007 47k
R008 47k
C005 0.1
C103 0.1
C006 0.1
C105 0.1
C104 0.1
C106 0.1
C007 0.1
C008 0.1
C113 3300/80
C114 3300/80
D013 1SS133
D001 1SS133
D014 1SS133
D002 1SS133
D011 1SS133
D003 1SS133
D012 1SS133
D004 1SS133
D015 1SS133
D005 1SS133
D017 1SS133
D007 1SS133
R001 8.2k
R002 3.3k
R003 10k
R004 10k
R102 100 1/4W
R103 33k
C116 3.3/50
Q101 DTC114ES
Q101, Q102 RESET
Q102 KTC3199GR
D107 1SS133
RY102 AC12V SDT-S-112 LMR
D108 1SS133
D109 1SS133
D103 1SS133
D104 1SS133
D105 1SS133
D106 1SS133
C101 470/25
PR108 125MA 125V
PT2 SUB ANF-8 (U)
FC101
F101 8A 125V
FC104
R101 2.2M 1/2W
T101
T102
120V AC.
60HZ
CNA001
CN1
FROM A MAIN C.B WH001
VS1
VS2
GND
GND
FL1
FL2
P-ON
VSTBY
RESET
19
19
0
2.5
2.5
12

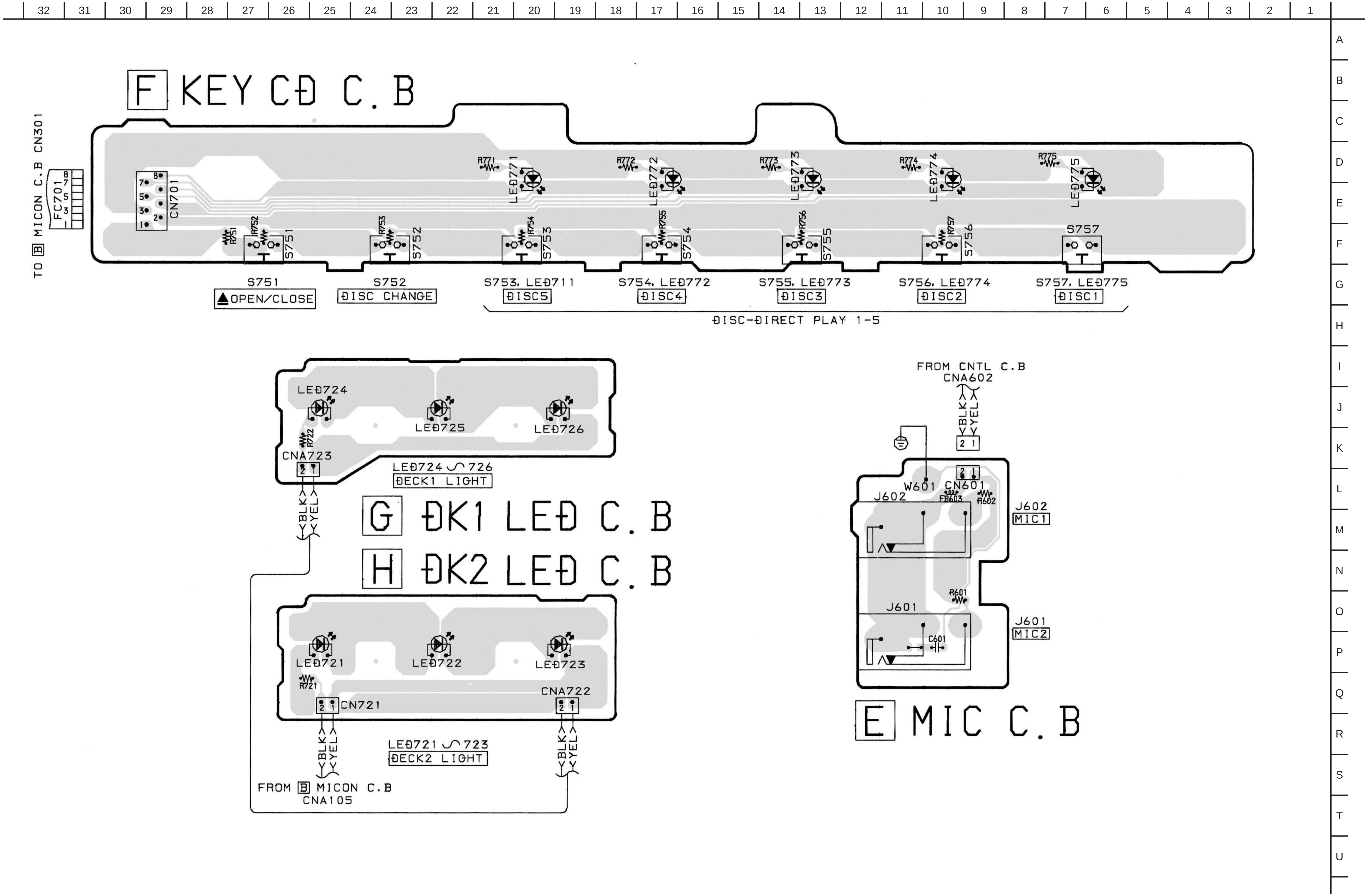
WIRING - 7 (LH : PT)


32
31
30
29
28
27
26
25
24
23
22
21
20
19
18
17
16
15
14
13
12
11
10
9
8
7
6
5
4
3
2
1
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P
Q
R
S
T
U
FROM C AMP-IF C.B
WH101
5 3 1
CNA101
J PT C.B <LH ONLY>
TO A MAIN C.B
WH001
CNA001
9
7
5
3
1
WHT
CN001
CN002
D107
RY101
T102
AC 120V/
220∿230V/240V
50/60HZ
T101
FC102
F102
FC103
FC104
F101
FC101
D011
D012
D013
D014
D015
D017
D003
D004
D001
D002
D005
D007
R004
R003
R109
C112
C107
C003
R005
D101
PR106
C108
C004
R001
R006
C110
C002
C111
C109
C001
R112
PT1
19
18
17
16
15
14
13
12
11
10
2
3
4
5
6
7
TF
S101
AC VOLTAGE
120V
220∿230V
240V
1
2
3
4
5
6
7
8
C113
PR103
C104
C007
R008
D102
R111
C106
C008
R002
C105
C006
C114
R007
R110
C103
C005
PT2
4
3
2
1
6
8
D103
D105
D108
D109
D106
D104
C116
Q101
B C E
Q102
B C E
R103
C101
R102

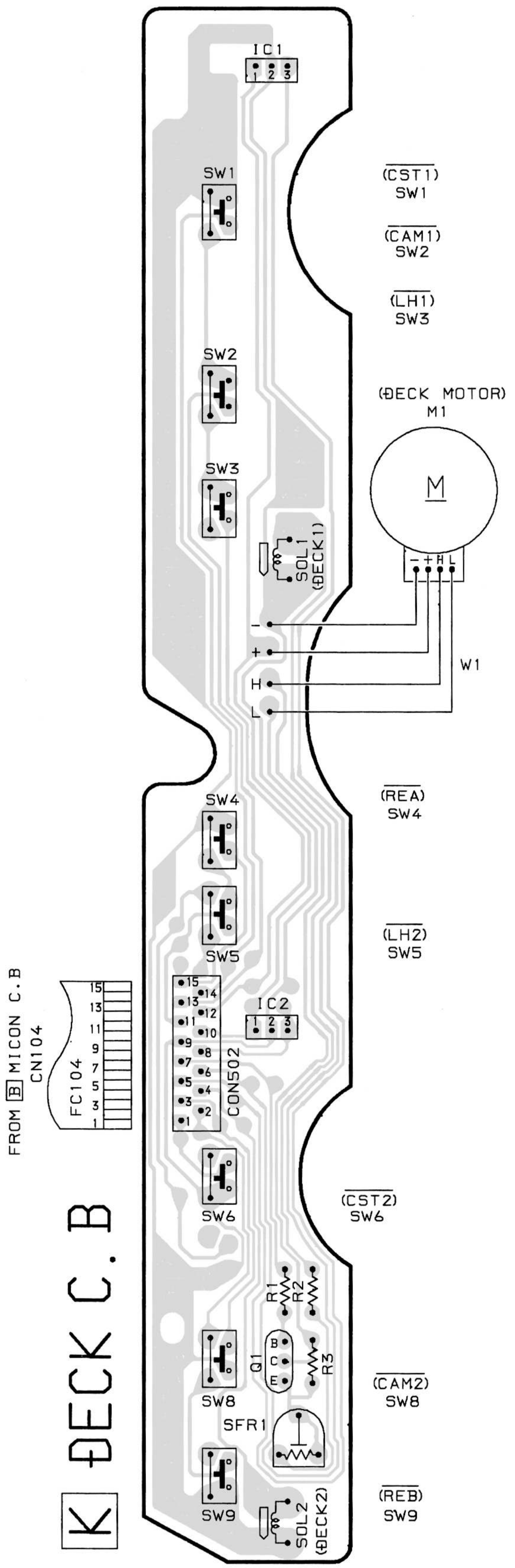
SCHEMATIC DIAGRAM - 9 (LH : PT)


J PT C.B <LH ONLY>
FROM C AMP IF C.B WH101
CNA101 CN002
+VH 1 52
+VM 2 32
GND 3
-VM 4 -32
-VH 5 -52
D101 GBU4DL-6419
D102 GBU6JL-6131
C107 0.1
C003 0.1
C108 0.1
C004 0.1
C112 3300/50
C109 0.1
C001 0.1
C110 0.1
C002 0.1
C111 3300/50
R109 27k
R110 47k
R111 47k
R112 27k
PR106 10A 60V
PR103 10A 60V
PT1 PT, AMA-3 LH
TF
RY101 AC12V-ALA2PF12
S101 SLIDE 1-2-3 SWS2301
AC VOLTAGE
-120V
-220-230V
-240V
F101 4A 250V
FC101 FC104
F102 4A 250V
FC103 FC102
R006 47k
R005 47k
R007 47k
R008 47k
C113 3300/71
C103 0.1
C005 0.1
C105 0.1
C006 0.1
C114 3300/71
C104 0.1
C007 0.1
C106 0.1
C008 0.1
D013 1SS133
D001 1SS133
D014 1SS133
D002 1SS133
D011 1SS133
D003 1SS133
D012 1SS133
D004 1SS133
D015 1SS133
D005 1SS133
R001 8.2k
R002 3.3k
R003 10k
R004 10k
D017 1SS133
D007 1SS133
R102 100 1/4W
R103 33k
Q101, 102 RESET
D107 1SS133
C116 3.3/50
Q101 DTC114ES
Q102 KTC3199GR
D108 1SS133
D109 1SS133
D103 1SS133
D104 1SS133
D105 1SS133
D106 1SS133
C101 470/25
PT2 SUB ANF-8 (H) KAM1
T101
T102
AC 120/220∼230/240V
50/60HZ
CNA001 CN1
FROM A MAIN C.B WH001
VS1 1
VS2 2
GND 3
GND 4
FL1 5 2.5
FL2 6 2.5
P-ON 7
VSTBY 8
RESET 9

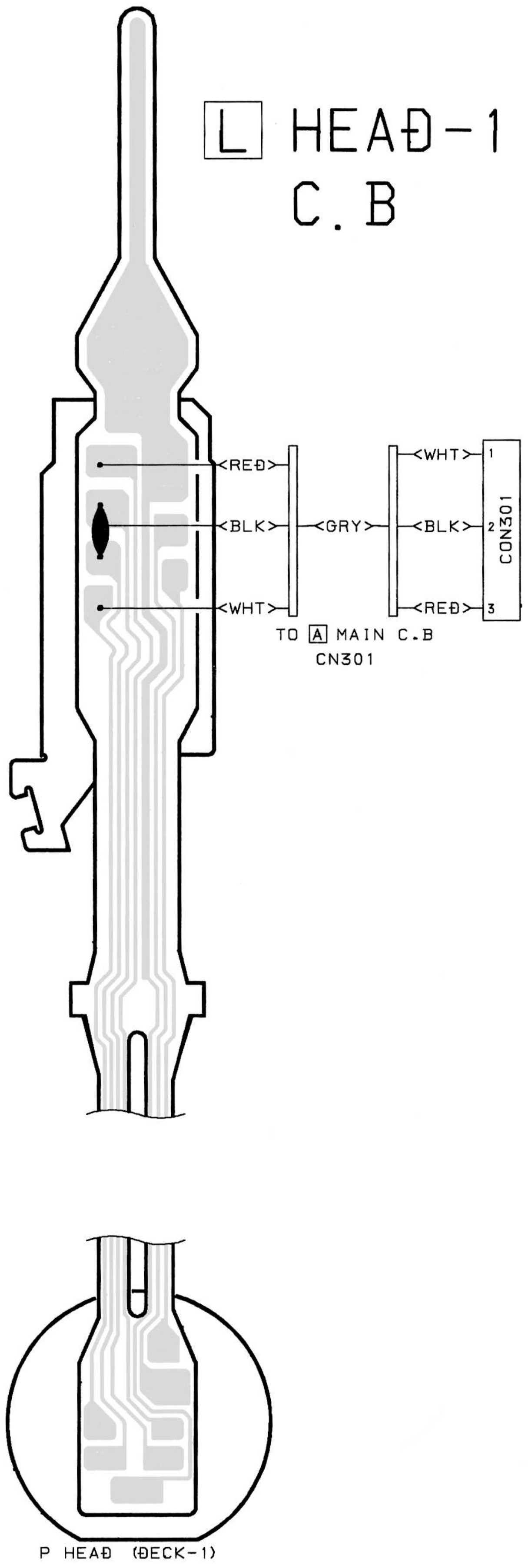
WIRING - 8 (KEY CD / DK1 LED / DK2 LED / MIC)


32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1
A B C D E F G H I J K L M N O P Q R S T U
F KEY CD C.B
TO B MICON C.B CN301
FC701
CN701
R751 R752 R753 R754 R755 R756 R757
R771 R772 R773 R774 R775
LED771 LED772 LED773 LED774 LED775
S751 S752 S753 S754 S755 S756 S757
S751
OPEN/CLOSE
S752
DISC CHANGE
S753, LED711
DISC5
S754, LED772
DISC4
S755, LED773
DISC3
S756, LED774
DISC2
S757, LED775
DISC1
DISC-DIRECT PLAY 1-5
LED724 LED725 LED726
R722
CNA723
LED724 ∽ 726
DECK1 LIGHT
BLK YEL
G DK1 LED C.B
H DK2 LED C.B
LED721 LED722 LED723
R721
CN721
CNA722
LED721 ∽ 723
DECK2 LIGHT
BLK YEL
BLK YEL
FROM B MICON C.B
CNA105
FROM CNTL C.B
CNA602
BLK YEL
W601 CN601
FB603 R602
J602
J602
MIC1
R601
J601
C601
J601
MIC2
E MIC C.B

32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1

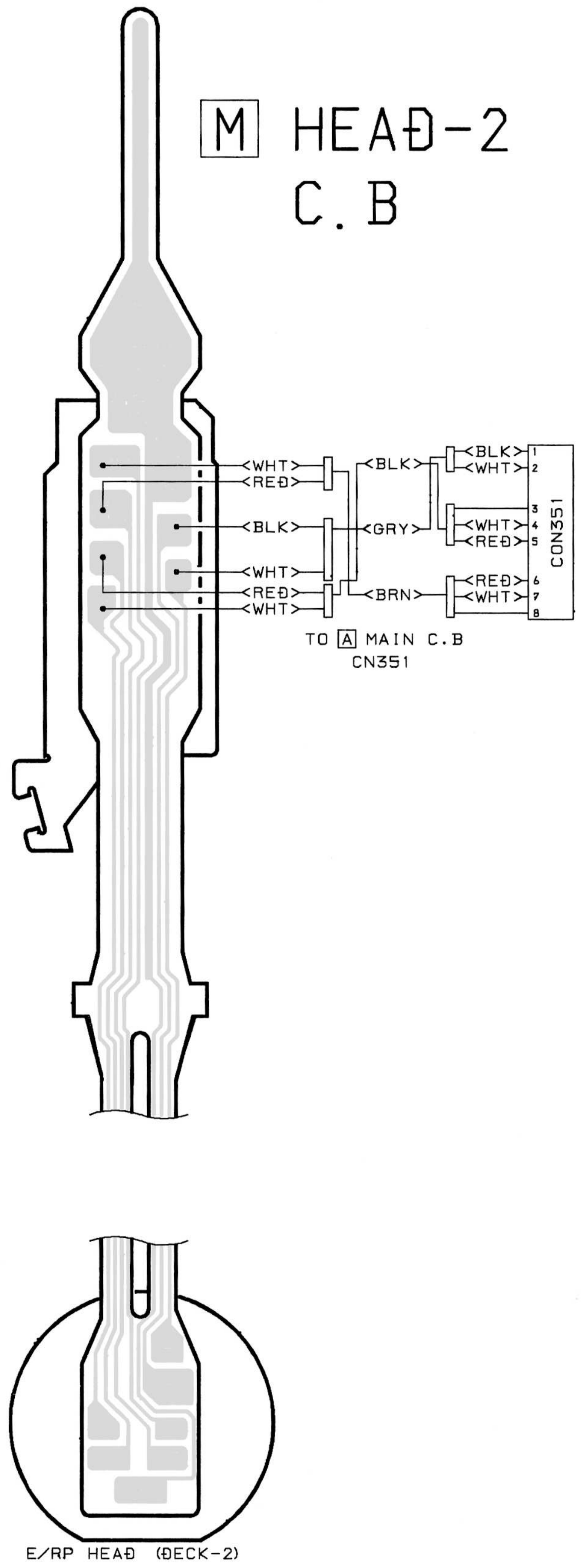

IC1
1 2 3
SW1
(CST1) SW1
(CAM1) SW2
(LH1) SW3
SW2
SW3
(DECK MOTOR) M1
M
- + H L
SOL1 (DECK1)
-
+
H
L
W1
SW4
(REA) SW4
SW5
(LH2) SW5
IC2
1 2 3
CON502
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1
FC104
FROM B MICON C.B CN104
SW6
(CST2) SW6
R1 R2
Q1
B C E
R3
SW8
(CAM2) SW8
SFR1
SW9
(REB) SW9
SOL2 (DECK2)

K DECK C.B


<RED>
<BLK>
<WHT>
<GRY>
<WHT> 1
<BLK> 2
<RED> 3
CON301
TO A MAIN C.B
CN301

L HEAD-1 C.B

P HEAD (DECK-1)


<WHT>
<RED>
<BLK>
<WHT>
<RED>
<WHT>
<BLK>
<GRY>
<BRN>
<BLK> 1
<WHT> 2
3
<WHT> 4
<RED> 5
<RED> 6
<WHT> 7
8
CON351
TO A MAIN C.B
CN351

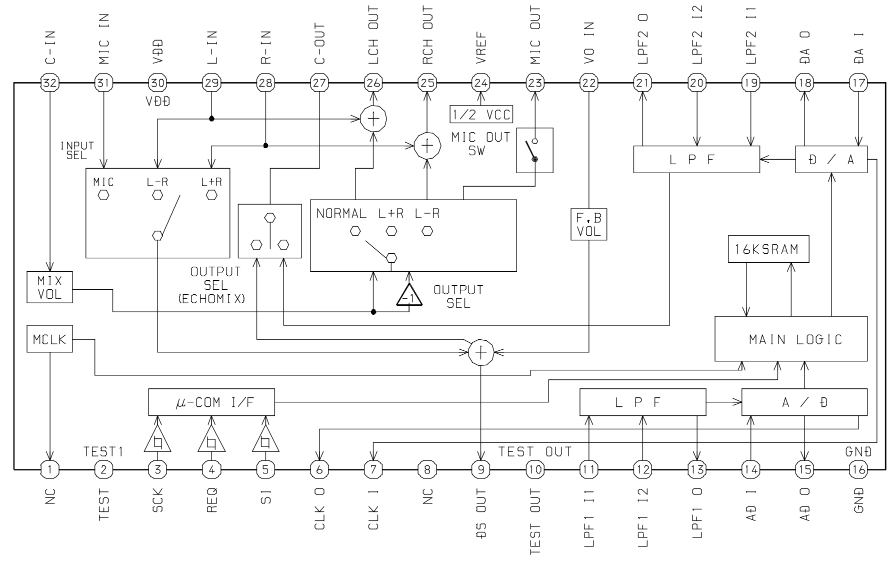
M HEAD-2 C.B

E/RP HEAD (DECK-2)

A B C D E F G H I J K L M N O P Q R S T U

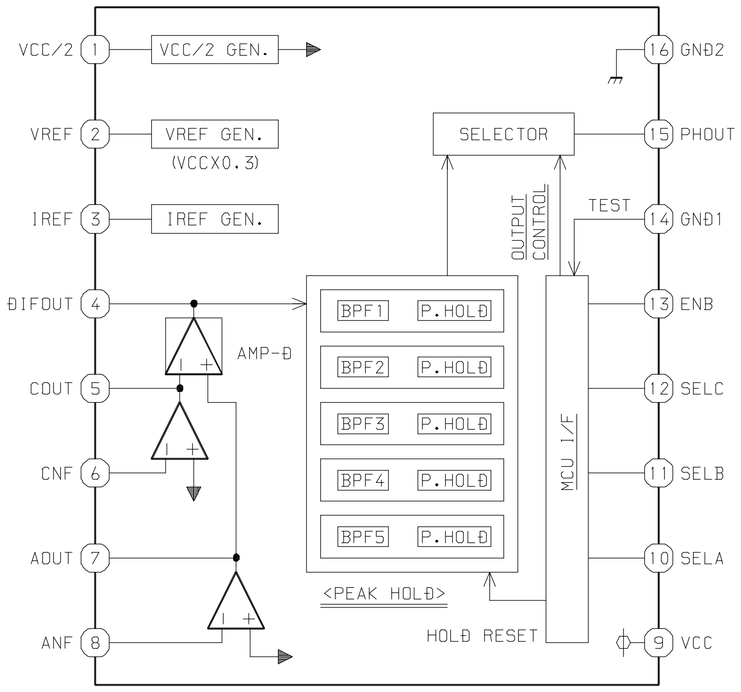
IC BLOCK DIAGRAM

IC, M65849BFP631D



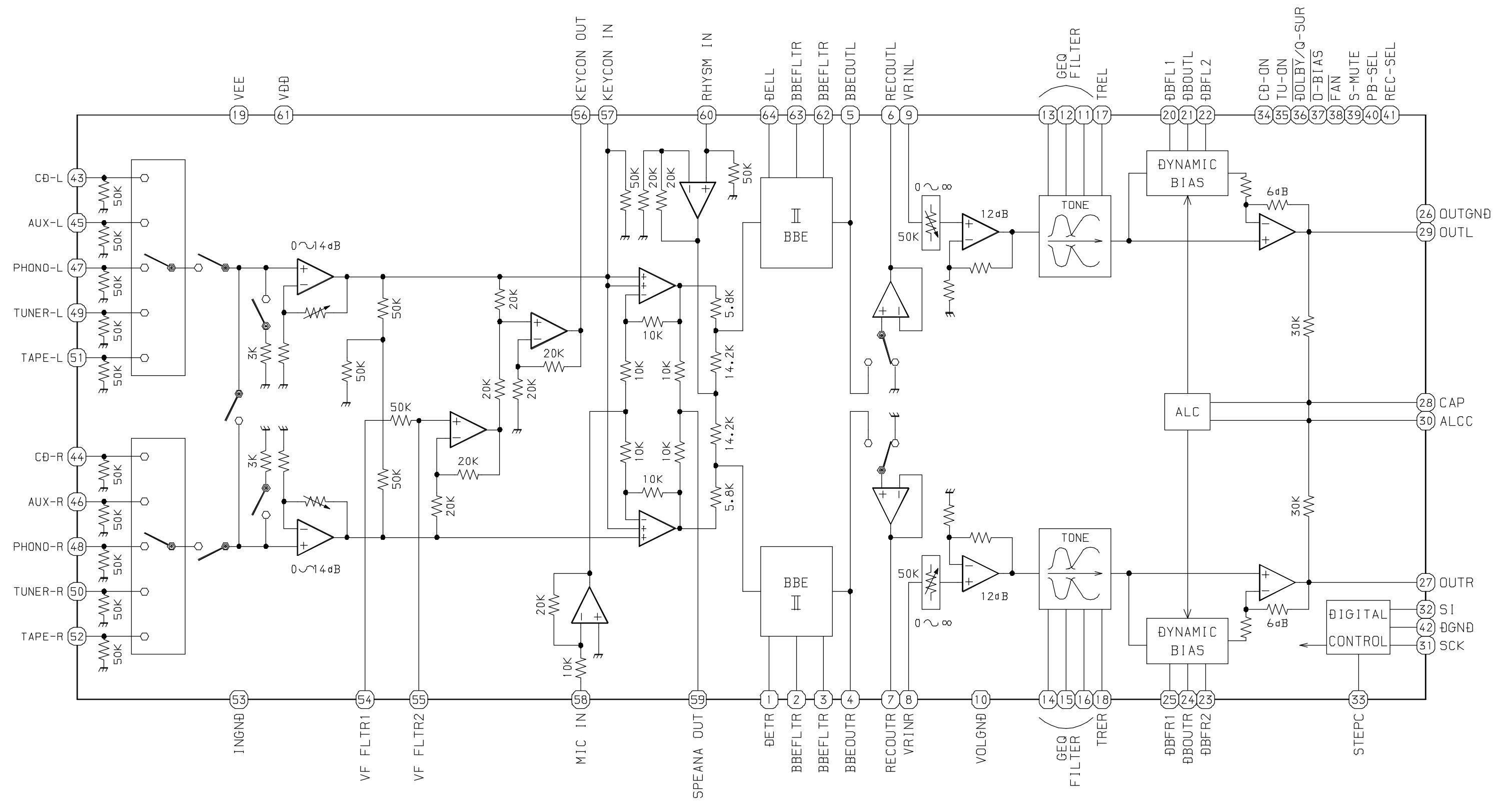
C-IN 32
MIC IN 31
VDD 30
L-IN 29
R-IN 28
C-OUT 27
LCH OUT 26
RCH OUT 25
VREF 24
MIC OUT 23
VO IN 22
LPF2 O 21
LPF2 I2 20
LPF2 I1 19
DA O 18
DA I 17
VDD
INPUT SEL
MIC
L-R
L+R
1/2 VCC
MIC OUT SW
NORMAL L+R L-R
F.B VOL
L P F
D / A
16KSRAM
OUTPUT SEL (ECHOMIX)
OUTPUT SEL
MIX VOL
MCLK
MAIN LOGIC
μ-COM I/F
L P F
A / D
TEST1
TEST OUT
GND
1 NC
2 TEST
3 SCK
4 REQ
5 SI
6 CLK O
7 CLK I
8 NC
9 D5 OUT
10 TEST OUT
11 LPF1 I1
12 LPF1 I2
13 LPF1 O
14 AD I
15 AD O
16 GND

IC, M61506FP



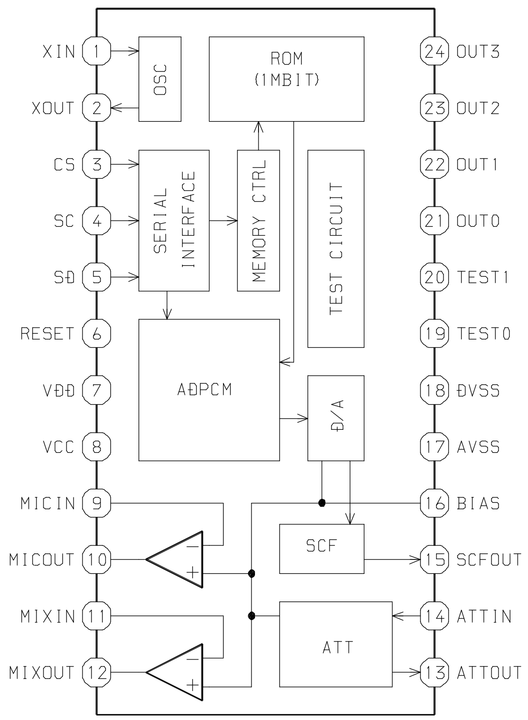
VCC/2 1
VREF 2
IREF 3
DIFOUT 4
COUT 5
CNF 6
AOUT 7
ANF 8
VCC/2 GEN.
VREF GEN.
(VCCX0.3)
IREF GEN.
AMP-D
SELECTOR
OUTPUT CONTROL
TEST
BPF1 P.HOLD
BPF2 P.HOLD
BPF3 P.HOLD
BPF4 P.HOLD
BPF5 P.HOLD
<PEAK HOLD>
MCU I/F
HOLD RESET
16 GND2
15 PHOUT
14 GND1
13 ENB
12 SELC
11 SELB
10 SELA
9 VCC

IC, BD3876KS2



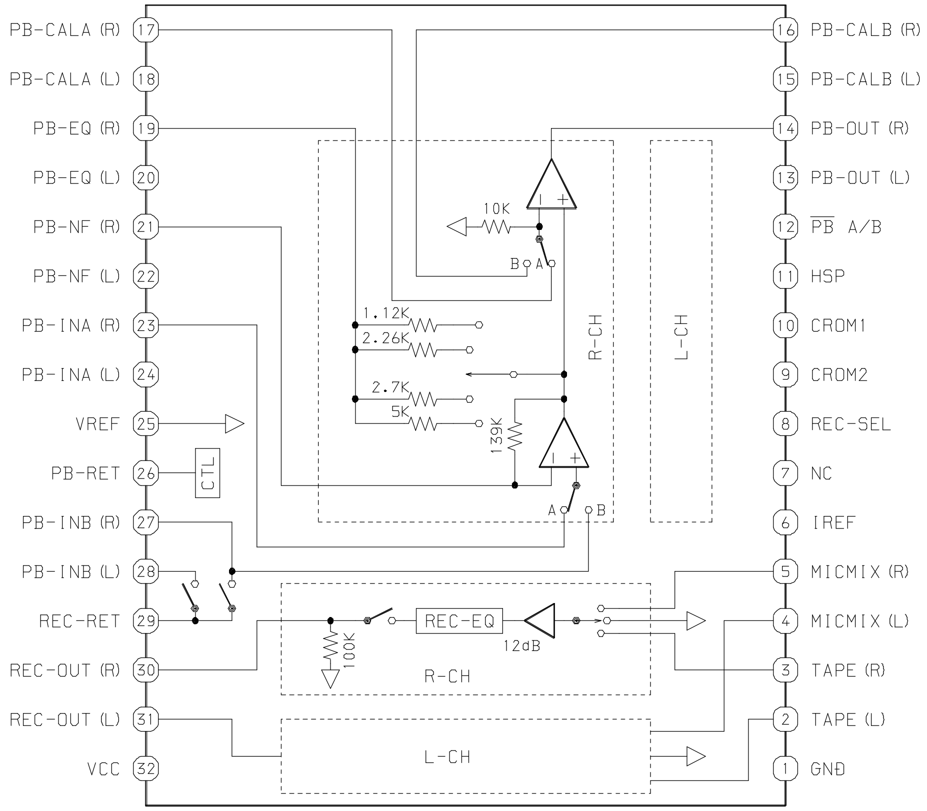
VEE 19
VDD 61
KEYCON OUT 56
KEYCON IN 57
RHYSM IN 60
DELL 64
BBEFLTR 63
BBEFLTR 62
BBEOUTL 5
RECOUTL 6
VRINL 9
GEQ FILTER 13 12 11
TREL 17
DBFL1 20
DBOUTL 21
DBFL2 22
CD-ON 34
TU-ON 35
DOLBY/Q-SUR 36
D-BIAS 37
FAN 38
S-MUTE 39
PB-SEL 40
REC-SEL 41
CD-L 43
AUX-L 45
PHONO-L 47
TUNER-L 49
TAPE-L 51
CD-R 44
AUX-R 46
PHONO-R 48
TUNER-R 50
TAPE-R 52
50K
3K
0~14dB
20K
10K
5.8K
14.2K
30K
12dB
6dB
0~∞
II BBE
BBE II
TONE
DYNAMIC BIAS
ALC
DIGITAL CONTROL
26 OUTGND
29 OUTL
28 CAP
30 ALCC
27 OUTR
32 SI
42 DGND
31 SCK
INGND 53
VF FLTR1 54
VF FLTR2 55
MIC IN 58
SPEANA OUT 59
DETR 1
BBEFLTR 2
BBEFLTR 3
BBEOUTR 4
RECOUTR 7
VRINR 8
VOLGND 10
GEQ FILTER 14 15 16
TRER 18
DBFR1 25
DBOUTR 24
DBFR2 23
STEPC 33

IC, BU9990-03FS

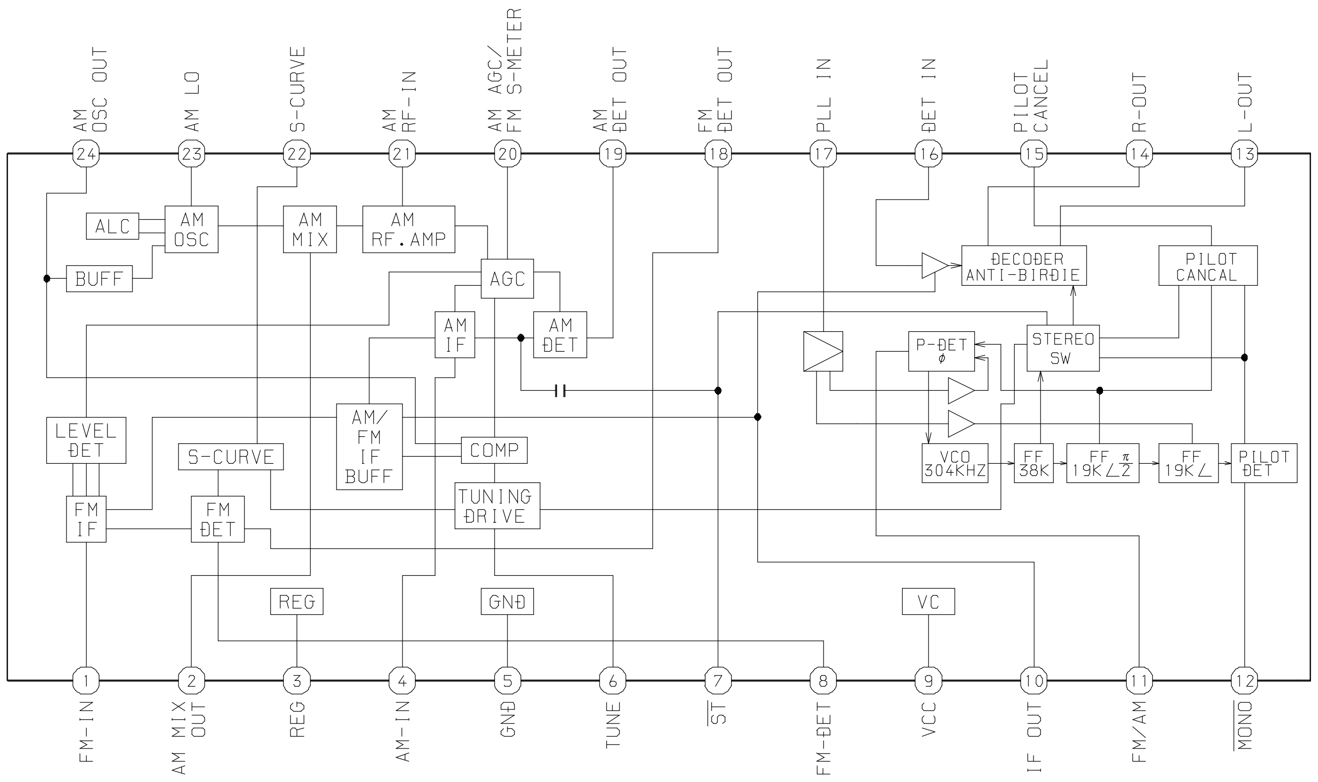


XIN 1
XOUT 2
CS 3
SC 4
SD 5
RESET 6
VDD 7
VCC 8
MICIN 9
MICOUT 10
MIXIN 11
MIXOUT 12
OSC
ROM (1MBIT)
SERIAL INTERFACE
MEMORY CTRL
TEST CIRCUIT
ADPCM
D/A
SCF
ATT
24 OUT3
23 OUT2
22 OUT1
21 OUT0
20 TEST1
19 TEST0
18 DVSS
17 AVSS
16 BIAS
15 SCFOUT
14 ATTIN
13 ATTOUT

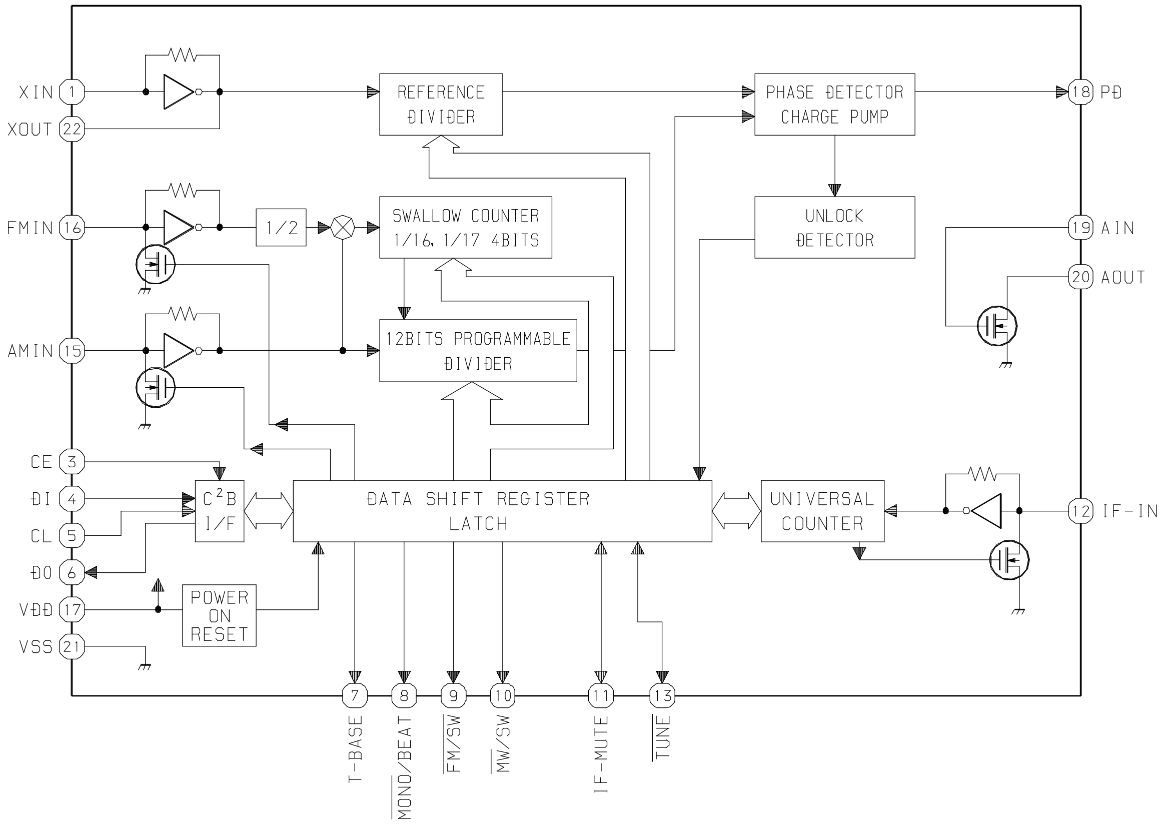
IC, BA7762AFS


PB-CALA (R) 17
PB-CALA (L) 18
PB-EQ (R) 19
PB-EQ (L) 20
PB-NF (R) 21
PB-NF (L) 22
PB-INA (R) 23
PB-INA (L) 24
VREF 25
PB-RET 26
CTL
PB-INB (R) 27
PB-INB (L) 28
REC-RET 29
REC-OUT (R) 30
REC-OUT (L) 31
VCC 32
16 PB-CALB (R)
15 PB-CALB (L)
14 PB-OUT (R)
13 PB-OUT (L)
12 PB A/B
11 HSP
10 CROM1
9 CROM2
8 REC-SEL
7 NC
6 IREF
5 MICMIX (R)
4 MICMIX (L)
3 TAPE (R)
2 TAPE (L)
1 GND
10K
B A
1.12K
2.26K
2.7K
5K
139K
A B
R-CH
L-CH
100K
REC-EQ
12dB
R-CH
L-CH

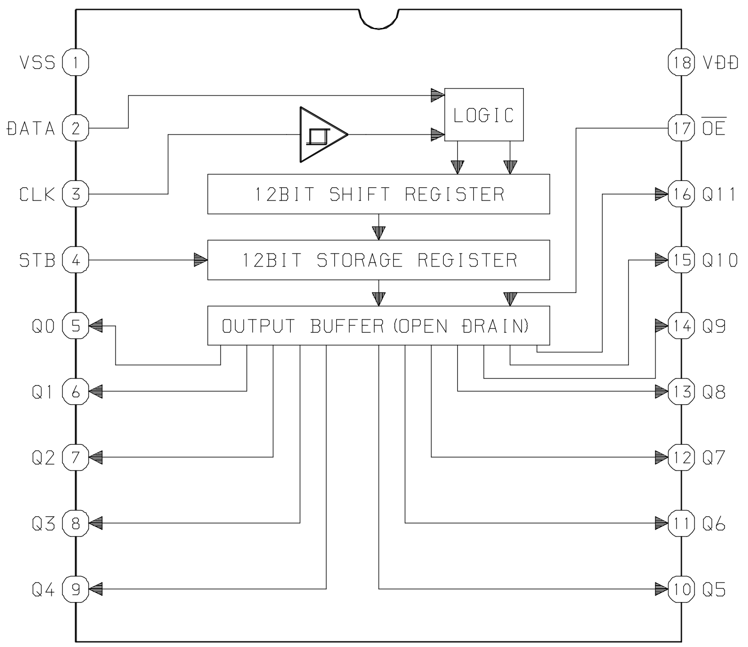
IC, LA1843


AM OSC OUT 24
AM LO 23
S-CURVE 22
AM RF-IN 21
AM AGC/ FM S-METER 20
AM DET OUT 19
FM DET OUT 18
PLL IN 17
DET IN 16
PILOT CANCEL 15
R-OUT 14
L-OUT 13
ALC
AM OSC
AM MIX
AM RF.AMP
BUFF
AGC
DECODER ANTI-BIRDIE
PILOT CANCAL
AM IF
AM DET
P-DET φ
STEREO SW
LEVEL DET
S-CURVE
AM/ FM IF BUFF
COMP
VCO 304KHZ
FF 38K
FF 19K
FF 19K
PILOT DET
FM IF
FM DET
TUNING DRIVE
REG
GND
VC
1 FM-IN
2 AM MIX OUT
3 REG
4 AM-IN
5 GND
6 TUNE
7 ST
8 FM-DET
9 VCC
10 IF OUT
11 FM/AM
12 MONO

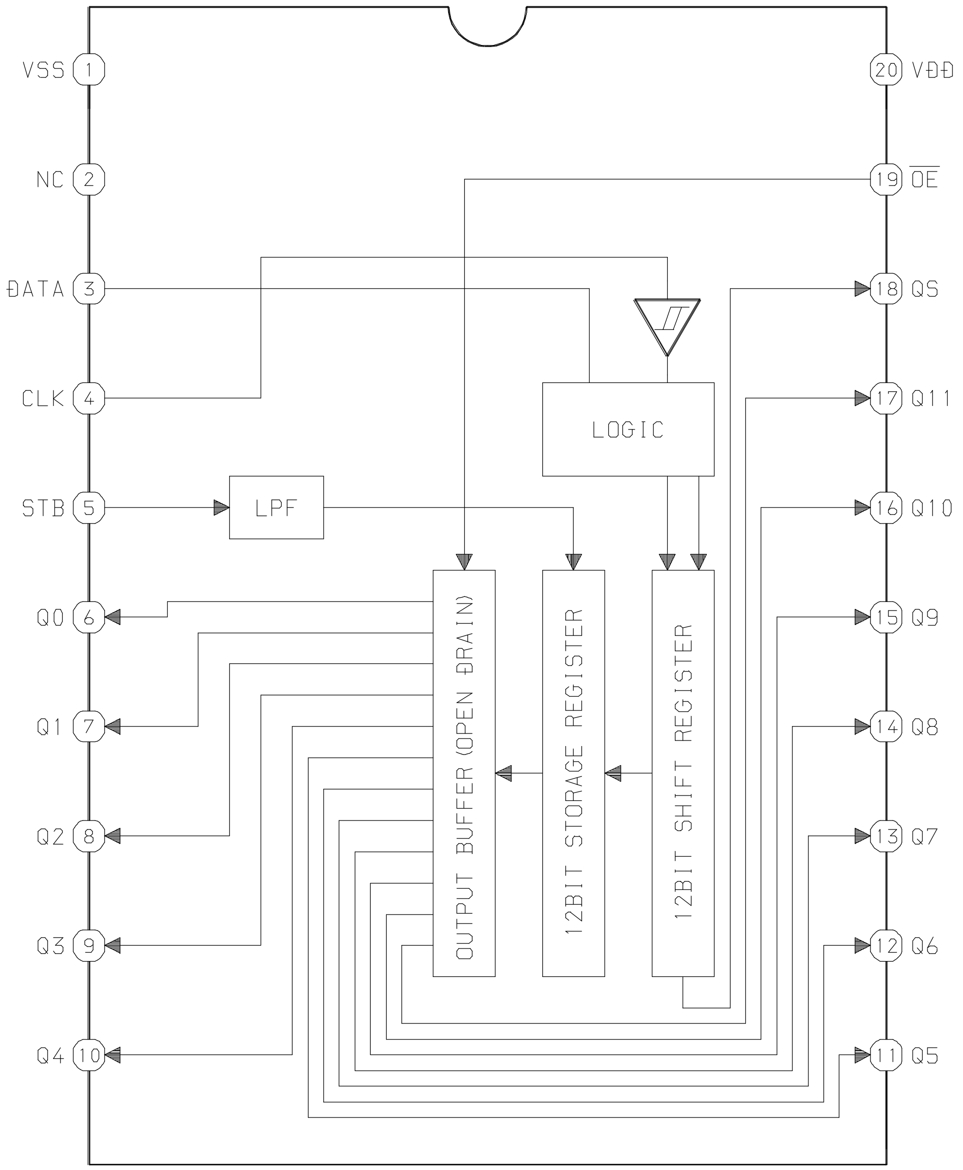
IC, LC72131D


XIN 1
XOUT 22
FMIN 16
AMIN 15
CE 3
DI 4
CL 5
DO 6
VDD 17
VSS 21
REFERENCE DIVIDER
PHASE DETECTOR CHARGE PUMP
1/2
SWALLOW COUNTER 1/16, 1/17 4BITS
UNLOCK DETECTOR
12BITS PROGRAMMABLE DIVIDER
C²B I/F
DATA SHIFT REGISTER LATCH
UNIVERSAL COUNTER
POWER ON RESET
18 PD
19 AIN
20 AOUT
12 IF-IN
7 T-BASE
8 MONO/BEAT
9 FM/SW
10 MW/SW
11 IF-MUTE
13 TUNE

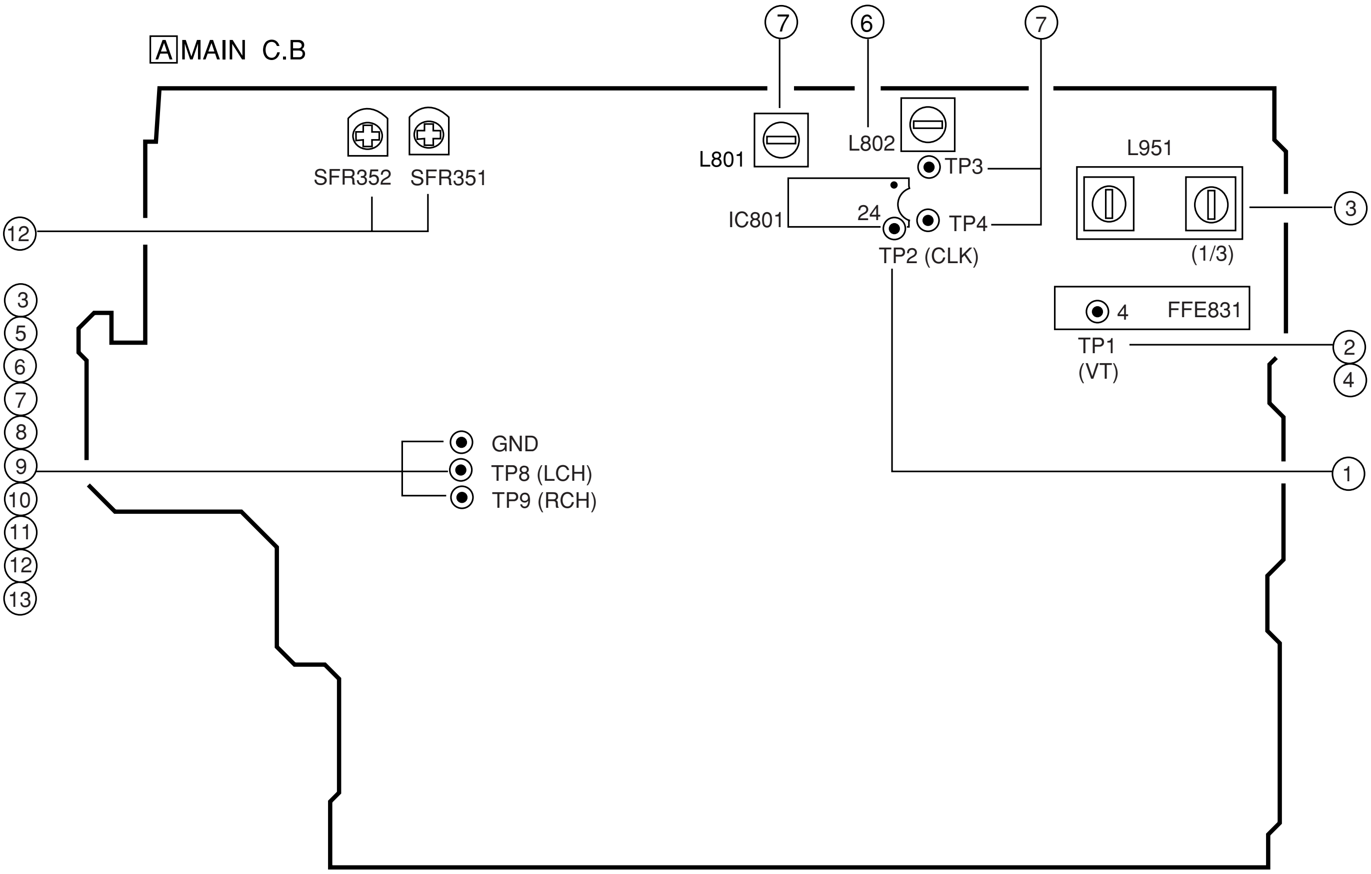
IC, BU2092F


VSS 1
DATA 2
CLK 3
STB 4
Q0 5
Q1 6
Q2 7
Q3 8
Q4 9
LOGIC
12BIT SHIFT REGISTER
12BIT STORAGE REGISTER
OUTPUT BUFFER (OPEN DRAIN)
18 VDD
17 OE
16 Q11
15 Q10
14 Q9
13 Q8
12 Q7
11 Q6
10 Q5

IC, BU2099FV


VSS 1
NC 2
DATA 3
CLK 4
STB 5
Q0 6
Q1 7
Q2 8
Q3 9
Q4 10
20 VDD
19 $\overline{OE}$
18 QS
17 Q11
16 Q10
15 Q9
14 Q8
13 Q7
12 Q6
11 Q5
LOGIC
LPF
OUTPUT BUFFER (OPEN DRAIN)
12BIT STORAGE REGISTER
12BIT SHIFT REGISTER

ADJUSTMENT <TUNER / DECK / FRONT>



< TUNER SECTION >

1. Clock Frequency Check
   Settings : • Test point : TP2 (CLK)
   Method : Set to AM 1710kHz and check that the test point is 2160kHz ± 45Hz.

2. AM VT Check
   Settings : • Test point : TP1 (VT)
   Method : Set to AM 1710kHz, AM 530kHz and check that the test point is less than 8.5V (1710kHz) and more than 0.6V (530kHz).

3. AM Tracking Adjustment
   Settings : • Test point : TP8 (Lch), TP9 (Rch)
   • Adjustment location :
   L951 (1/3) 1000kHz
   Method : Set to AM 1000kHz and adjust L951 (1/3) so that the test point is maximum.

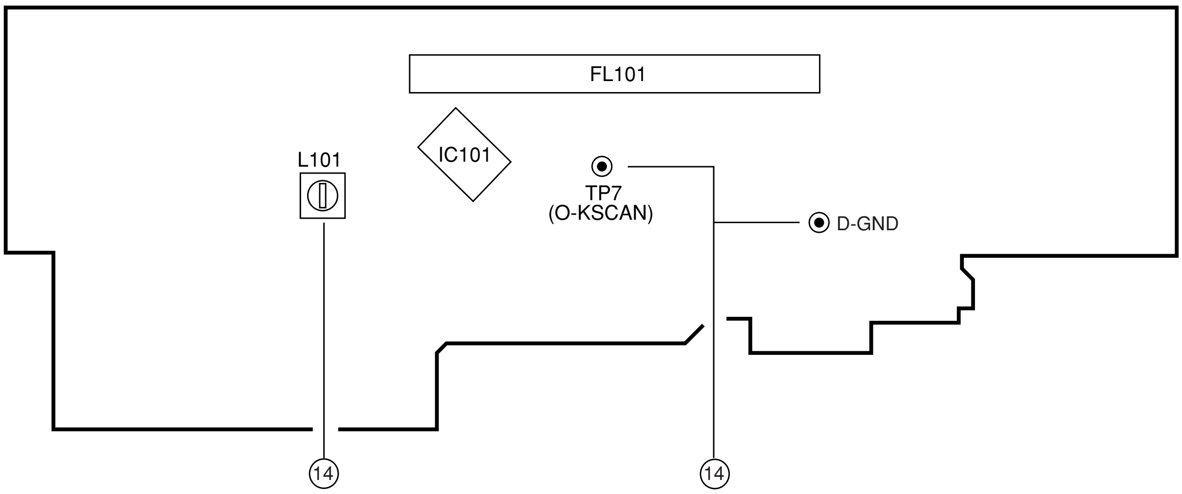
4. FM VT Check
   Settings : • Test point : TP1 (VT)
   Method : Set to FM 108.0MHz and check that the test point is less than 8.0V.
   Set to FM 87.5MHz and check that the test point is more than 0.5V.

5. FM Tracking Check
   Settings : • Test point : TP8 (Lch), TP9 (Rch)
   Method : Set to FM 98.0MHz and check that the test point is less than 9.0dBμV.

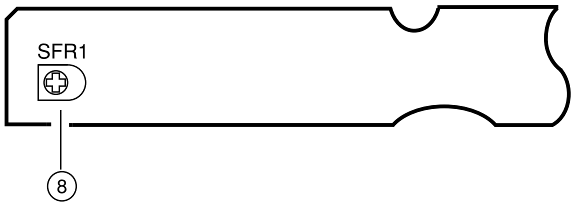
6. AM IF Adjustment
   Settings : • Test point : TP8 (Lch), TP9 (Rch)
   • Adjustment location :
   L802 .... 450kHz

7. DC Balance / Mono Distortion Adjustment
   Settings : • Test point : TP3, TP4 (DC Balance)
   TP8 (Lch), TP9 (Rch) (Distortion)
   • Adjustment location : L801
   • Input level : 60dBμV
   Method : Set to FM 98.0MHz and adjust L801 so that the voltage between TP3 and TP4 becomes 0V ± 0.03V.
   Next, check that the distortion is minimum

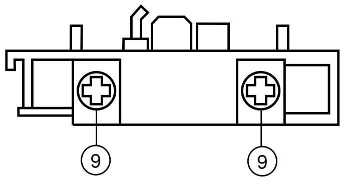
B MICON C.B



K DECK C.B



DECK–1 P HEAD
DECK-2 R/P/E HEAD



< DECK SECTION >

8. Tape Speed Adjustment (DECK 2)
   Settings : • Test tape : TTA–100
   • Test point : TP8 (Lch), TP9 (Rch)
   • Adjustment location : SFR1
   Method : Play back (FWD) the test tape and adjust SFR1 so that the frequency counter reads 3000Hz ± 5Hz and ± 45Hz (REV) with respect to forward speed.

9. Head Azimuth Adjustment (DECK 1, DECK 2)
   Settings : • Test tape : TTA–330
   • Test point : TP8 (Lch), TP9 (Rch)
   • Adjustment location : Head azimuth adjustment screw
   Method : Play back (FWD) the 8kHz signal of the test tape and adjust screw so that the output becomes maximum.

10. PB Frequency Response Check (DECK 1, DECK 2)
    Settings : • Test tape : TTA–330
    • Test point :TP8 (Lch), TP9 (Rch)
    Method : Play back the 315Hz and 8kHz signals of the test tape and check that the output ratio of the 8kHz signal with respect to that of the 315Hz signal is within 5dB.

11. PB Sensitivity Check (DECK 1, DECK 2)
    Settings : • Test tape : TTA–200
    • Test point : TP8 (Lch), TP9 (Rch)
    Method : Play back the test tape and check that the output level of the test point is 230mV ± 3dB.

12. REC/PB Frequency Response Adjustment (DECK 2)
    Settings : • Test tape : TTA–602
    • Test point : TP8 (Lch), TP9 (Rch)
    • Input signal : 1kHz / 10kHz (LINE IN)
    • Adjustment location : SFR351 (Lch)
    SFR352 (Rch)
    Method : Apply a 1kHz signal and REC mode. Then adjust OSC attenuator so that the output level at the TP8, TP9 becomes 0dB (16mV). Record and play back the 1kHz and 10kHz signals and adjust SFRs so that the output of the 10kHz signals becomes 0dB ± 0.5dB with respect to that of the 1kHz signal.

13. REC/PB Sensitivity Check (DECK 2)
    Settings : • Test tape : TTA–602
    • Test point : TP8 (Lch), TP9 (Rch)
    • Input signal : 1kHz (LINE IN)
    Method : Apply a 1kHz signal and REC mode. Then adjust OSC attenuator so that the output level at TP8, TP9 becomes 0dB (160mV). Record and play back the 1kHz signals and check that the output is 0dB ± 3.5dB.

< FRONT SECTION >

14. MICON OSC Adjustment
    Settings : • Test point : TP7 (O-KSCAN) and D-GND
    • Adjustment location : L101
    Method : Pull out AC plug, then insert AC plug again with pressing of TUNER / BAND function key and POWER key. Adjust L101 so that the frequency across the test point is 208.80Hz ± 0.21Hz or 4.78ms ~ 4.79ms.

IC DESCRIPTION

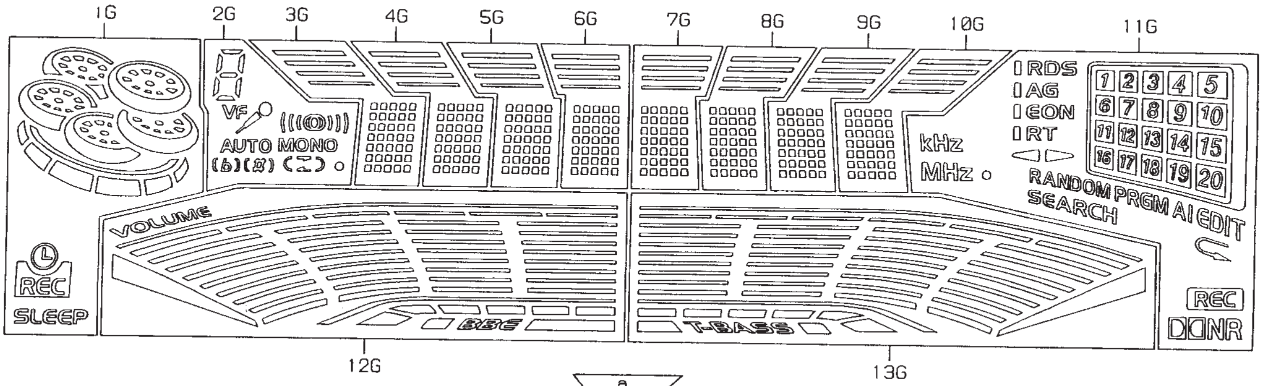
IC, LC876580W-5P55

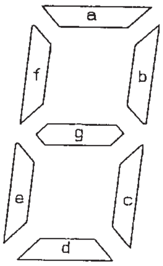
Pin No.	Pin Name	I/O	Description
1	M-CLK	O	Common serial clock.
2	M-DATA	O	Common serial data.
3	M-STB	O	Common serial strobe.
4	PLL-CE	O	Tuner PLL IC chip enable.
5	SR-LCK	O	Shift register IC LATCH clock.
6	RYM-CS	O	RHYTHM IC chip select.
7	POWER	O	Audio power ON/OFF.
8	MUTE	O	System MUTE ON/OFF.
9	$\overline{\text{C-SHIFT}}$	O	CLOCK SHIFT output. "L" : SHIFT
10	$\overline{\text{HP-MUTE}}$	I	Head phone jack detection. "L" : MUTE
11	RESET	I	System RESET input.
12	RTVR	I	Volume rotary encoder.
13	JOG	I	Dial JOG rotary encoder.
14	GND	–	Connected to GND.
15	CF1	I	Oscillator circuit input.
16	CF2	O	Oscillator circuit output.
17	VDD	–	Power supply.
18	HOLD	I	System HOLD input.
19	KEY1	I	Tact key matrix 1 input.
20	KEY2	I	Tact key matrix 2 input.
21	KEY3	I	Tact key matrix 3 input.
22	CD-SW	I	CD MECHA SW matrix input.
23	DISH	I	CD turntable photo sensor.
24	SPEANA	I	Spectrum analyser level detection.
25	MIC	I	MIC input level detection.
26	RDS-SG	I	RDS Signal level input. (Not used)
27	TM-BASE	I	Time base clock input.
28	CD-WRQ/ RDS-CLK	I	CD Read Write Request / Tuner RDS clock input (Not used).
29	REM	I	Remote control signal input.
30 ~ 42	G13 ~ G1	O	FL grid G13 ~ G1 output.
43 ~ 45	P38 ~ P36	O	FL segment P38 ~ P36 output.
46	VDD	–	Power supply.
47	P35/SPEANA–A	O	FL segment P35 output / Spectrum analyser BPF switching control A output.
48	P34/SPEANA–B	O	FL segment P34 output / Spectrum analyser BPF switching control B output.
49	P33/SPEANA–C	O	FL segment P33 output / Spectrum analyser BPF switching control C output.
50	P32/CSNDEMO	O/I	FL segment P32 output / Initial DEMO MODE detect. "H" : CASINO DEMO.
51	–VP	–	Power supply for FL.
52	P31/TU3	O/I	FL segment P31 output / TUNER series, TU3 select.
53	P30/TU2	O/I	FL segment P30 output / TUNER series, TU2 select.
54	P29/TU1	O/I	FL segment P29 output / TUNER series, TU1 select.
55	P28/$\overline{\text{DSP}}$	O/I	FL segment P28 output / DSP function detection. "L" : ON

Pin No.	Pin Name	I/O	Description
56	P27/RHYTHM	O/I	FL segment P27 output / RHYTHM function detection. "H" : ON
57	P26/KEYCON	O/I	FL segment P26 output / KEYCON function detection. "H" : ON
58	P25/5MODE	O/I	FL segment P25 output / GEQ 5MODE select. "H" : 5 MODE (Not used)
59	P24/$\overline{\text{ECO}}$	O/I	FL segment P24 output / ECO mode detection. "H" : ECO OFF
60	P23	O/I	FL segment P23 output.
61	P22	O/I	FL segment P22 output.
62	P21/5.1+DLPRO	O/I	FL segment P21 output / 5.1CH+PROLOGIC detection. "H" : ON
63	P20/DLPRO	O/I	FL segment P20 output / DOLBY PROLOGIC detection. "H" : ON (Not used)
64	P19/$\overline{\text{CST2}}$	O/I	FL segment P19 output / Deck 2 cassette detection. "L" : ON
65	P18/$\overline{\text{REB}}$	O/I	FL segment P18 output / Deck 2 side B recordable SW. "L" : REC
66	P17/$\overline{\text{CAM2}}$	O/I	FL segment P17 output / Deck 2 CAM SW input. "L" : ON
67	P16/AUTO1	O/I	FL segment P16 output / Deck 1 auto stop input.
68	P15/AUTO2	O/I	FL segment P15 output / Deck 2 auto stop input.
69	P14/$\overline{\text{CAM1}}$	O/I	FL segment P14 output / Deck 1 CAM SW input. "L" : ON
70	P13/$\overline{\text{CST1}}$	O/I	FL segment P13 output / Deck 1 cassette detection SW. "L" : ON
71	P12/$\overline{\text{REA}}$	O/I	FL segment P12 output / Deck 2 side-A recordable SW. "L" : REC
72	VDD	–	Power supply.
73 ~ 83	P11 ~ P1	O	FL segment P11 ~ P1 output.
84	P39	O	FL segment P39 output.
85	$\overline{\text{KEYSCAN}}$	O	KEYSCAN output. "L" : ON
86	$\overline{\text{MOTOR}}$	O	DECK motor ON/OFF control. "L" : ON
87	$\overline{\text{SOL1}}$	O	DECK 1 solenoid control. "L" : ON
88	$\overline{\text{SOL2}}$	O	DECK 2 solenoid control. "L" : ON
89	GND	–	Connected to GND.
90	VDD	–	Power supply.
91	DISH-RVS	O	CD dish reverse output. "H" : REV
92	DISH-FWD	O	CD dish forward output. "H" : FWD
93	$\overline{\text{OPEN}}$	O	CD tray OPEN output. "L" : OPEN
94	$\overline{\text{CLOSE}}$	O	CD tray CLOSE output. "L" : CLOSE
95	CD-DATA/ RDS DATA	O/I	Serial data output to CD. RDS serial data input (Not used).
96	CD-XLT	O	CD DSP serial LATCH output. (Chip enable)
97	CD-CLK	O	CD DSP serial CLOCK output.
98	CD-LED	O	CD flash window LED control.
99	CD-SUBQ/IFC	I	CD SUBQ (Sub code) serial data input / TUNER IF COUNT data input.
100	DRF/STEREO	I	RF (radio frequency) detect / TUNER STEREO signal input.

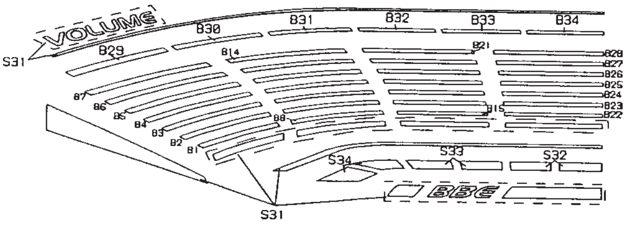
FL (BJ751GNK) GRID ASSIGNMENT AND ANODE CONNECTION

GRID ASSIGNMENT

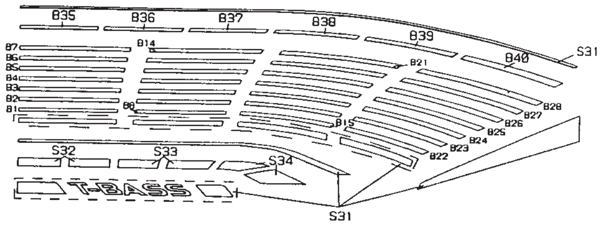

1G
2G
3G
4G
5G
6G
7G
8G
9G
10G
11G
VF
AUTO MONO
kHz
MHz
RDS
AG
EON
RT
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
RANDOM PRGM AI EDIT
SEARCH
VOLUME
REC
SLEEP
BBE
T-BASS
REC
DNR
12G
13G



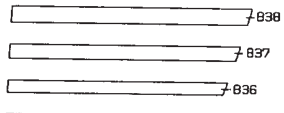
(2G)


VOLUME
S31
B29
B30
B31
B32
B33
B34
B14
B21
B28
B27
B26
B25
B24
B23
B22
B15
B8
B7
B6
B5
B4
B3
B2
B1
S34
S33
S32
BBE
S31

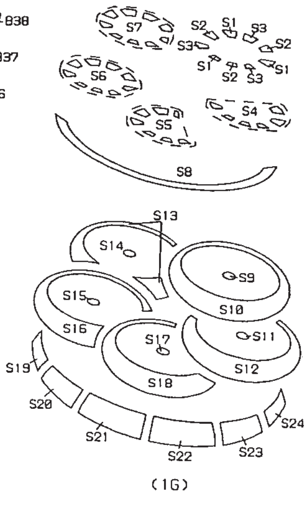
(12G)


B35
B36
B37
B38
B39
B40
S31
B7
B6
B5
B4
B3
B2
B1
B14
B8
B21
B15
B28
B27
B26
B25
B24
B23
B22
S32
S33
S34
T-BASS
S31

(13G)


B38
B37
B36
B35

(3G~10G)


S7
S2
S1
S3
S3
S2
S1
S2
S3
S1
S6
S4
S5
S8
S13
S14
S9
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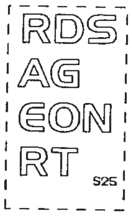
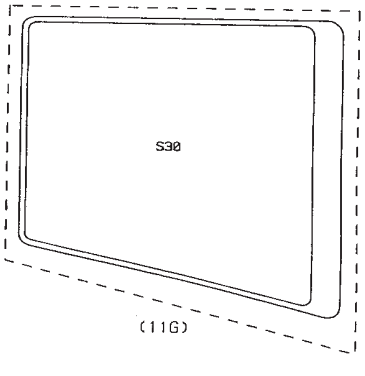
S19
S20
S21
S22
S23
S24

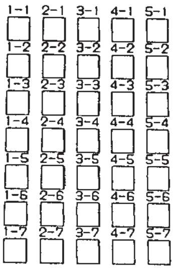
(1G)


RDS
AG
EON
RT
S25

(11G)



(11G)


1-1
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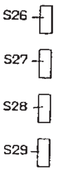
4-7
5-7

(3G~10G)

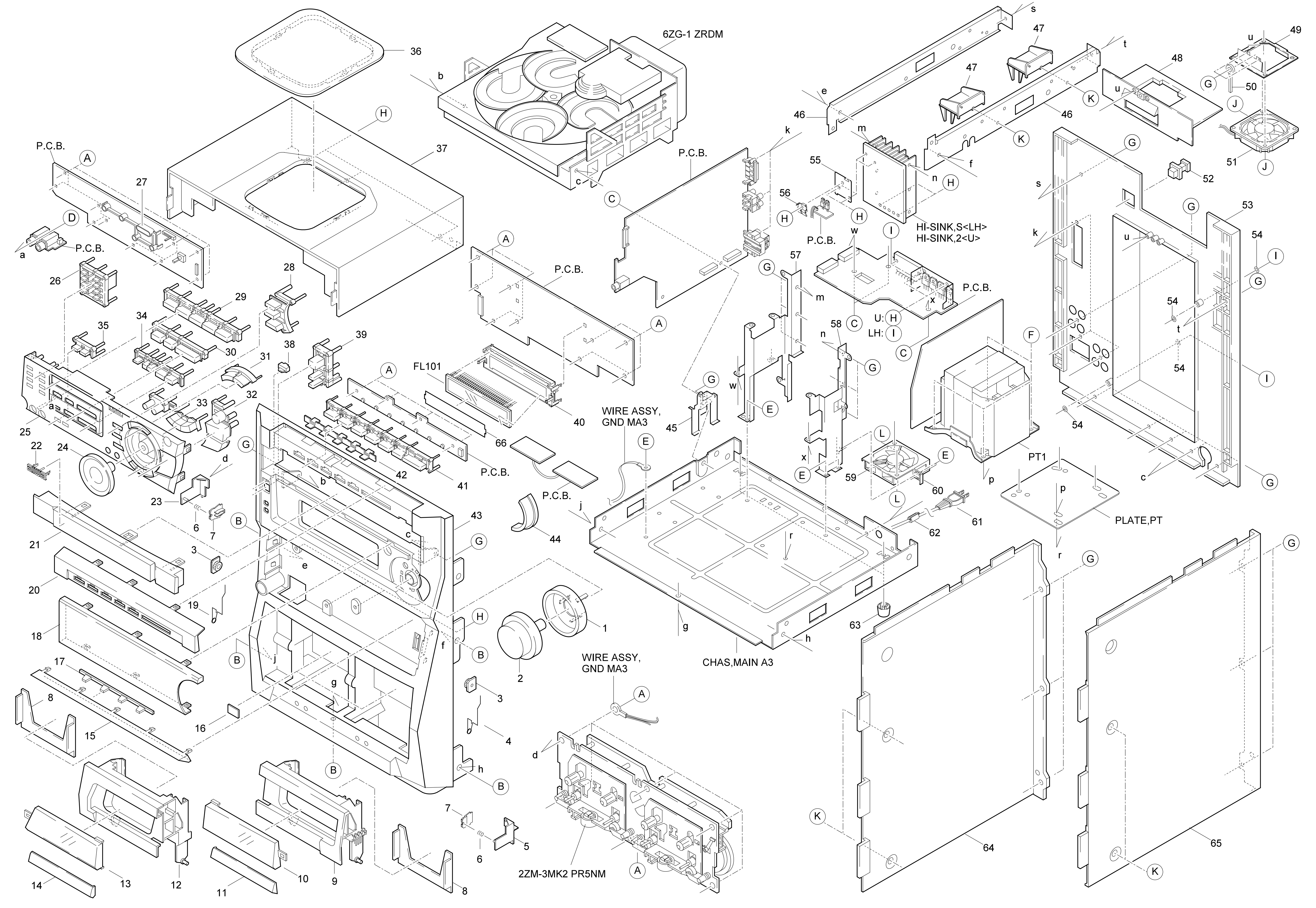

S26
S27
S28
S29

(11G)

ANODE CONNECTION

	1G	2G	3G	4G	5G	6G	7G	8G	9G	10G	11G	12G	13G
P1	SLEEP	–	1–1	1–1	1–1	1–1	1–1	1–1	1–1	1–1	S30	S31	S31
P2	REC	–	2–1	2–1	2–1	2–1	2–1	2–1	2–1	2–1	1	S32	S32
P3	🕒	–	3–1	3–1	3–1	3–1	3–1	3–1	3–1	3–1	2	S33	S33
P4	S1	–	4–1	4–1	4–1	4–1	4–1	4–1	4–1	4–1	3	S34	S34
P5	S2	–	5–1	5–1	5–1	5–1	5–1	5–1	5–1	5–1	4	B1	B1
P6	S3	–	1–2	1–2	1–2	1–2	1–2	1–2	1–2	1–2	5	B8	B8
P7	S9	–	2–2	2–2	2–2	2–2	2–2	2–2	2–2	2–2	6	B15	B15
P8	S10	–	3–2	3–2	3–2	3–2	3–2	3–2	3–2	3–2	7	B22	B22
P9	S7	–	4–2	4–2	4–2	4–2	4–2	4–2	4–2	4–2	8	B2	B2
P10	S14	–	5–2	5–2	5–2	5–2	5–2	5–2	5–2	5–2	9	B9	B9
P11	S13	a	1–3	1–3	1–3	1–3	1–3	1–3	1–3	1–3	10	B16	B16
P12	S11	b	2–3	2–3	2–3	2–3	2–3	2–3	2–3	2–3	11	B23	B23
P13	S4	f	3–3	3–3	3–3	3–3	3–3	3–3	3–3	3–3	12	B3	B3
P14	S12	g	4–3	4–3	4–3	4–3	4–3	4–3	4–3	4–3	13	B10	B10
P15	S6	c	5–3	5–3	5–3	5–3	5–3	5–3	5–3	5–3	14	B17	B17
P16	S15	e	1–4	1–4	1–4	1–4	1–4	1–4	1–4	1–4	15	B24	B24
P17	S16	d	2–4	2–4	2–4	2–4	2–4	2–4	2–4	2–4	16	B4	B4
P18	S5	VF	3–4	3–4	3–4	3–4	3–4	3–4	3–4	3–4	17	B11	B11
P19	S17	🎤	4–4	4–4	4–4	4–4	4–4	4–4	4–4	4–4	18	B18	B18
P20	S18	((●))	5–4	5–4	5–4	5–4	5–4	5–4	5–4	5–4	19	B25	B25
P21	S8	AUTO	1–5	1–5	1–5	1–5	1–5	1–5	1–5	1–5	20	B5	B5
P22	S19	MONO	2–5	2–5	2–5	2–5	2–5	2–5	2–5	2–5	S25	B12	B12
P23	S20	(♭)	3–5	3–5	3–5	3–5	3–5	3–5	3–5	3–5	S26	B19	B19
P24	S21	(♯)	4–5	4–5	4–5	4–5	4–5	4–5	4–5	4–5	S27	B26	B26
P25	S22	(	5–5	5–5	5–5	5–5	5–5	5–5	5–5	5–5	S28	B6	B6
P26	S23	⇄	1–6	1–6	1–6	1–6	1–6	1–6	1–6	1–6	S29	B13	B13
P27	S24	)	2–6	2–6	2–6	2–6	2–6	2–6	2–6	2–6	◁	B20	B20
P28	–	○	3–6	3–6	3–6	3–6	3–6	3–6	3–6	3–6	▷	B27	B27
P29	–	–	4–6	4–6	4–6	4–6	4–6	4–6	4–6	4–6	DD NR	B7	B7
P30	–	–	5–6	5–6	5–6	5–6	5–6	5–6	5–6	5–6	REC	B14	B14
P31	–	–	1–7	1–7	1–7	1–7	1–7	1–7	1–7	1–7	↩	B21	B21
P32	–	–	2–7	2–7	2–7	2–7	2–7	2–7	2–7	2–7	EDIT	B28	B28
P33	–	–	3–7	3–7	3–7	3–7	3–7	3–7	3–7	3–7	AI	B29	B35
P34	–	–	4–7	4–7	4–7	4–7	4–7	4–7	4–7	4–7	PRGM	B30	B36
P35	–	–	5–7	5–7	5–7	5–7	5–7	5–7	5–7	5–7	RANDOM	B31	B37
P36	–	–	B38	B38	B38	B38	B38	B38	B38	B38	SEARCH	B32	B38
P37	–	–	B37	B37	B37	B37	B37	B37	B37	B37	○	B33	B39
P38	–	–	B36	B36	B36	B36	B36	B36	B36	B36	MHz	B34	B40
P39	–	–	B35	B35	B35	B35	B35	B35	B35	B35	kHz	–	–

MECHANICAL EXPLODED VIEW 1 / 1



36
b
6ZG-1 ZRDM
H
37
c
s
47
t
49
u
48
G
50
e
46
K
J
m
f
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52
k
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P.C.B.
56
n
HI-SINK,S<LH>
HI-SINK,2<U>
P.C.B.
A
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FL101
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41
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G
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c
j
f
g
h
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3
4
5
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6
8
WIRE ASSY,
GND MA3
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w
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62
63
L
PT1
p
PLATE,PT
r
CHAS,MAIN A3
U: H
LH: I
C
F
I
53
54
2ZM-3MK2 PR5NM
64
65

MECHANICAL PARTS LIST 1 / 1

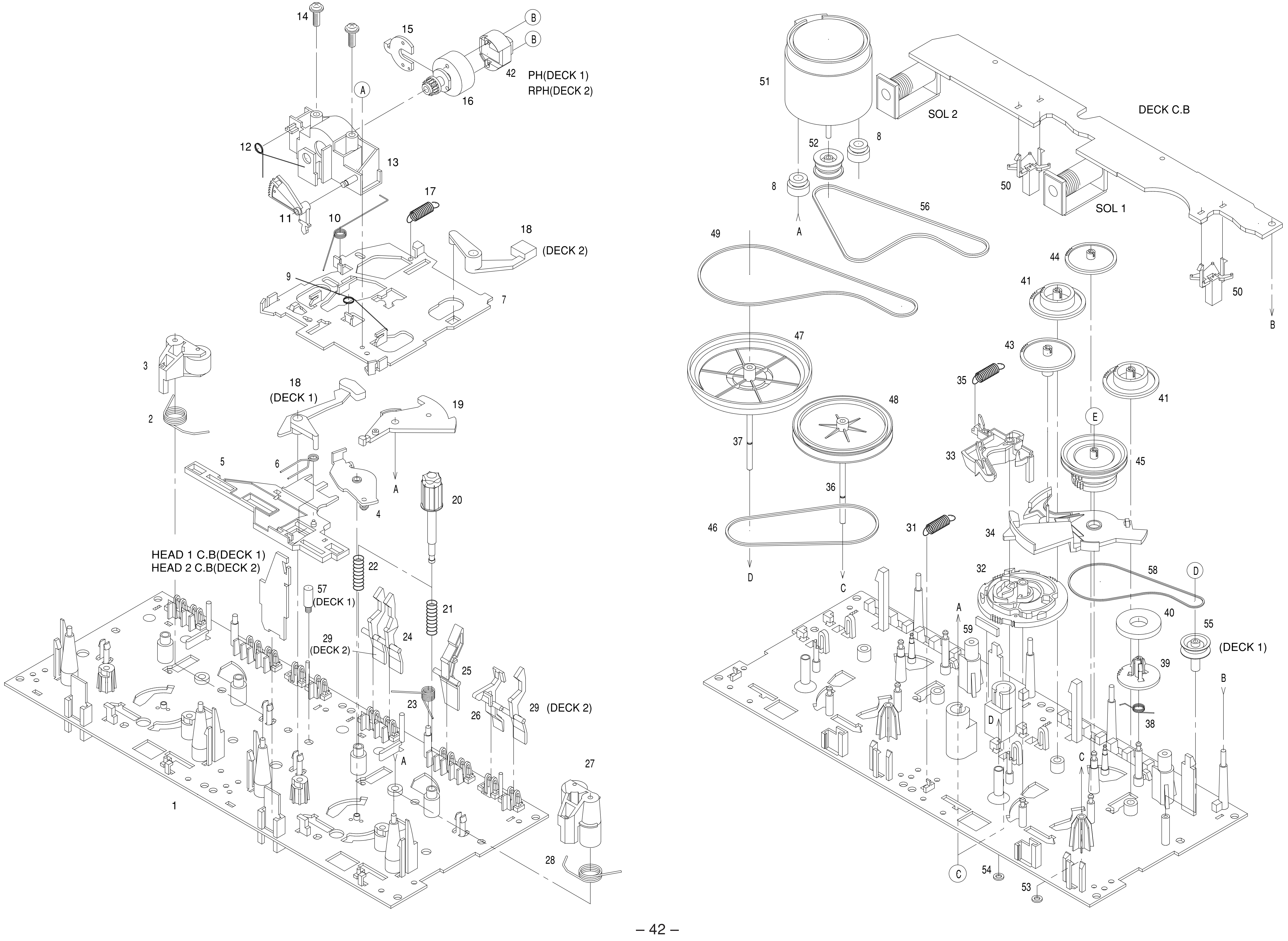
REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	8A-MA3-094-010		RING,MAIN<LH>
1	8A-MA3-095-010		RING,VOL<U>
2	8A-MA3-090-010		KNOB,RTRY MAIN
3	87-NF8-220-010		DMPR,150
4	82-NF5-219-010		SPR-T,EJECT 2 (SIN)
5	87-NF4-217-110		HLDR,LOCK 2
6	86-NF9-224-010		SPR-C,LOCK
7	82-NF5-229-010		PLATE,LOCK
8	86-NF6-061-010		REFLECTOR,CASS
9	8A-MA3-026-010		BOX,CASS R
10	8A-MA3-056-010		WINDOW,CASS R
11	8A-MA3-036-010		PANEL,CASS R 3
12	8A-MA3-025-010		BOX,CASS L
13	8A-MA3-055-010		WINDOW,CASS L
14	8A-MA3-035-010		PANEL,CASS L 3
15	8A-MA3-041-010		PANEL,FUN 5F<LH>
15	8A-MA3-042-010		PANEL,FUN 5F U<U>
16	81-532-080-010		LABEL, CASS. COMPT
17	8A-MA3-102-010		REFLECTOR,FUN 5F<LH>
17	8A-MA3-103-010		REFLECTOR,FUN 5F U<U>
18	8A-MA3-050-010		WINDOW,DISP<LH>
18	8A-MA3-052-010		WINDOW,DISP U<U>
19	82-NF5-218-010		SPR-T,EJECT 1 (SIN)
20	8A-MA3-034-010		PANEL,CD LED
21	8A-MA3-037-010		PANEL ASSY,TRAY 3
22	87-B00-002-010		BADGE AIWA 30 ABS S1
23	87-NF4-216-010		HLDR,LOCK 1
24	8A-MA3-093-010		KNOB ASSY,RTRY JOG
25	8A-MA3-030-010		PANEL,FR H 3<LH>
25	8A-MA3-031-010		PANEL,FR U 3<U>
26	8A-MA3-081-010		KEY ASSY,GEQ 4M<U>
26	8A-MA3-080-010		KEY ASSY,GEQ 4M PM<LH>
27	8A-MA3-210-010		GUIDE,LED OPE
28	8A-MA3-071-010		KEY,TIMER
29	8A-MA3-066-010		KEY,FUN 5F
30	8A-MA3-083-010		KEY ASSY,DIR
31	8A-MA3-072-010		KEY,FREQ
32	8A-MA3-073-010		KEY,ENTER
33	8A-MA3-074-010		KEY,RHYTHM<LH>
34	8A-MA3-084-010		KEY ASSY,FF
35	8A-MA3-069-010		KEY,KARAOKE
36	8A-MA3-057-010		WINDOW,TOP<LH>
36	8A-MA3-058-010		WINDOW,TOP U<U>
37	8A-MA3-020-110		CABI,TOP<LH>
37	8A-MA3-021-110		CABI,TOP U<U>
38	8A-MA3-101-010		REFLECTOR,POWER
39	8A-MA3-075-010		KEY,POWER
40	88-MA1-205-010		GUIDE,FL
41	8A-MA3-061-010		KEY,CD
42	8A-MA3-100-010		REFLECTOR,CD

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
43	8A-MA3-001-010		CABI,FR U 3
44	8A-MA3-062-010		KEY,MIC<LH>
45	8A-MA3-207-010		HLDR,PWB MAIN H
46	88-MA1-208-210		JOINT,CABI
47	8A-MA3-212-010		HLDR,PWB PT
48	8A-MA3-211-010		COVER,FAN
49	8A-NF3-223-010		HLDR,FAN
50	87-064-185-010		HLDR,WIRE
51	87-A91-711-010		FAN,3110GL-B 4W-B34-H
52	84-ZG1-245-210		CAP,OPTICAL
53	8A-MA3-012-010		CABI,REAR LHSTNM<LH>
53	8A-MA3-010-010		CABI,REAR USTNM<U>
54	8A-MA3-214-010		W,3.5-6.5-1 W/ADH
55	8A-MA3-213-010		PLATE,TR
56	86-NF6-211-010		HLDR,IC T1.6
57	8A-MA3-205-010		HLDR,HT-SINK L
58	8A-MA3-206-010		HLDR,HT-SINK R
59	87-A91-423-010		FAN,AD0612DS-D7OGL
60	8A-MA2-202-010		HLDR,FAN
⚠ 61	87-A80-148-010		AC CORD ASSY,E BLK<LH>
⚠ 61	87-A80-149-010		AC CORD ASSY,U BLK<U>
62	87-085-185-010		BUSHING, AC CORD (E)<LH>
62	87-085-189-010		BUSHING, CORD (U)<U>
63	87-MA3-062-010		FOOT, H17
64	8A-MA3-045-010		PANEL,SIDE L 3<LH>
64	8A-MA3-047-010		PANEL,SIDE L 3 (U)<U>
65	8A-MA3-046-010		PANEL,SIDE R 3<LH>
65	8A-MA3-048-010		PANEL,SIDE R 3 (U)<U>
66	8A-MA3-110-010		PLATE,FL 3
A	87-078-060-010		BVIT3PB+3-10
B	87-591-095-410		TAPPING SCREW, QIT+3-8 (GLD)
C	87-NF4-224-010		S-SCREW,IT3B+3-8 CU
D	81-MK1-210-010		S-SCREW,VFT2+3-16
E	87-067-688-010		BVTT+3-6
F	87-067-975-010		S-SCREW,1T+4-8
G	87-067-703-010		TAPPING SCREW, BVT2+3-10
H	87-067-758-010		BVT2+3-12 W/O SLOT
I	87-067-581-010		S-SCREW,BVT2+3-15 W/O
J	87-067-579-010		TAPPING SCREW, BVT2+3-8
K	87-067-641-010		UTT2+3-8(W/O SLOT)BL
L	87-067-689-010		S-SCREW,BVT2+3-18

COLOR NAME TABLE

Basic color symbol	Color	Basic color symbol	Color	Basic color symbol	Color
B	Black	C	Cream	D	Orange
G	Green	H	Gray	L	Blue
LT	Transparent Blue	N	Gold	P	Pink
R	Red	S	Silver	ST	Titan Silver
T	Brown	V	Violet	W	White
WT	Transparent White	Y	Yellow	YT	Transparent Yellow
LM	Metallic Blue	LL	Light Blue	GT	Transparent Green
LD	Dark Blue	DT	Transparent Orange	GM	Metallic Green
YM	Metallic Yellow	DM	Metallic Orange		

TAPE MECHANISM EXPLODED VIEW 1 / 1


14
15
B
B
42
PH(DECK 1)
RPH(DECK 2)
A
16
12
13
17
11
10
18
(DECK 2)
9
7
3
18
(DECK 1)
19
2
5
6
4
A
20
HEAD 1 C.B(DECK 1)
HEAD 2 C.B(DECK 2)
22
57
(DECK 1)
21
24
29
(DECK 2)
25
23
26
29
(DECK 2)
A
27
1
28
51
SOL 2
DECK C.B
52
8
8
50
SOL 1
56
A
49
44
41
50
B
47
43
35
41
48
E
37
33
45
36
46
31
34
58
D
D
C
32
40
A
59
55
(DECK 1)
39
B
D
38
C
C
54
53

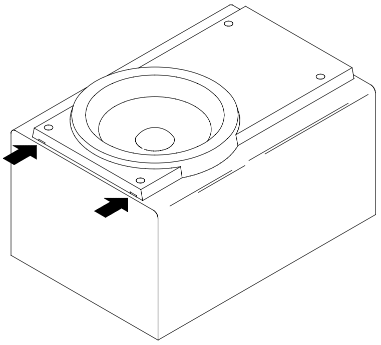
TAPE MECHANISM PARTS LIST 1 / 1

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	82-ZM3-301-519		CHAS ASSY,M2
2	82-ZM1-258-110		SPR-T,PINCH L
3	82-ZM1-341-110		LVR ASSY,PINCH L2
4	82-ZM1-333-010		PLATE,LINK 2
5	82-ZM1-266-11K		LVR,DIR
6	82-ZM1-214-010		SPR-T,DIR
7	82-ZM1-206-81K		CHAS,HEAD
8	82-ZM3-307-019		CUSH-G,DIA3.7-8-3.2
9	82-ZM1-269-219		SPR-T,BRG
10	82-ZM1-219-119		SPR-T,LINK
11	82-ZM1-210-119		GEAR,H T
12	82-ZM1-213-019		SPR-T,HEAD
13	82-ZM1-207-619		GUIDE,TAPE
14	86-ZM4-206-010		S-SCREW,AZIMUTH
15	82-ZM1-314-119		PLATE,HEAD
16	82-ZM1-208-119		HLDR,HEAD
17	82-ZM1-218-019		SPR-E,HB
18	82-ZM1-263-110		LVR,EJECT L (DECK 1)
18	82-ZM1-264-010		LVR,EJECT R (DECK 2)
19	82-ZM1-222-21K		LVR,PLAY
20	82-ZM1-217-319		REEL TABLE
21	82-ZM1-244-510		SPR-C,BT
22	82-ZM1-285-310		SPR-C,BT L
23	82-ZM1-257-019		SPR-T,CAS
24	82-ZM1-241-319		LVR,MC
25	82-ZM1-242-019		LVR,CAS
26	82-ZM1-243-019		LVR,STOP
27	82-ZM1-344-110		LVR ASSY,PINCH R2
28	82-ZM1-259-110		SPR-T,PINCH R
29	82-ZM1-240-11K		LVR,REC (DECK 2)
31	82-ZM1-255-319		SPR-E,LVR DIR
32	82-ZM3-305-01K		GEAR,CAM M2
33	82-ZM1-227-21K		LVR,TRIG
34	82-ZM3-306-11K		LVR,FR M2
35	82-ZM1-265-119		SPR-E,TRIG
36	82-ZM1-236-019		CAPSTAN N 2-41.5
37	82-ZM1-239-019		CAPSTAN N 2.2-41.7
38	82-ZM1-322-019		SPR-T,FR60
39	82-ZM1-220-219		GEAR,IDLER
40	82-ZM3-616-019		RING MAGNET 4
41	82-ZM1-216-31K		GEAR,REEL
42	87-A90-366-010		HEAD,PH YK50P-BF414 FPC
42	87-A90-367-010		HEAD,RPH YK56R-BF414 FPC
43	82-ZM1-225-21K		GEAR,FR
44	82-ZM1-226-019		GEAR,REW
45	82-ZM3-333-310		SLIP DISK ASSY 2
46	82-ZM1-338-010		BELT FR4
47	82-ZM1-349-110		FLY-WHL,R W(DECK 2)
47	82-ZM3-338-110		FLY-WHL,R3 W(DECK 1)
48	82-ZM1-348-010		FLY-WHL,L W(DECK 2)
48	82-ZM1-348-010		FLY-WHL,L W(DECK 1)
49	82-ZM3-329-210		BELT,SBU R2
50	82-ZM1-245-210		HLDR,IC
51	87-045-347-019		MOT,SHU2L 70(M1)
52	82-ZM3-221-010		PULLEY,MOT 2M
53	82-ZM1-288-019		SH,1.63-3.2-0.5 SLT
54	80-ZM6-243-019		SH,1.75-3.6-0.5 SLT
55	82-ZM3-335-210		PULLEY,COUPLER M3(DECK 1)
56	82-ZM3-337-010		BELT,SBU MOT 2
57	82-ZM3-339-010		SHAFT,COUPLER N3(DECK 1)
58	86-ZM1-206-010		BELT,MAIN L
59	82-ZM3-340-010		SH,BELT D2
A	85-ZM3-202-010		S-SCREW,TG
B	80-ZM6-207-019		V+1.6-7
C	82-ZM3-318-019		S-SCRW MOTOR M2
D	87-B10-043-010		W-P,0.99-4-0.25 SLT
E	82-ZM3-334-010		PW,2.16-6-0.4

SPEAKER DISASSEMBLY INSTRUCTIONS

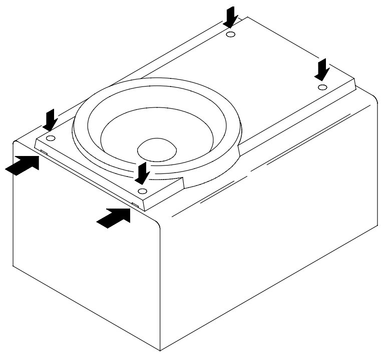
Type.1

Insert a flat-bladed screwdriver into the position indicated by the arrows and remove the panel. Remove the screws of each speaker unit and then remove the speaker units.



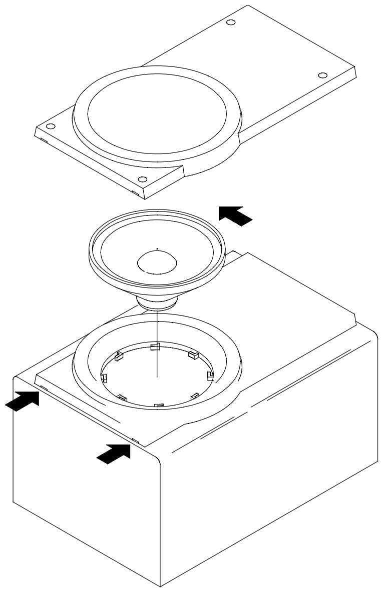
Type.2

Remove the grill frame and four pieces of rubber caps by pulling out with a flat-bladed screwdriver. Remove the screws from hole where installed rubber caps. Insert a flat-bladed screwdriver into the position indicated by the arrows and remove the panel. Remove the screws of each speaker unit and then remove the speaker units.

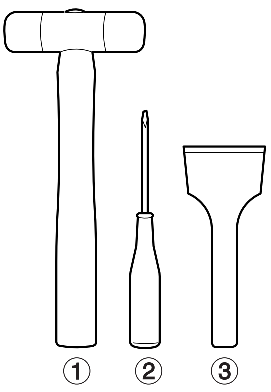


Type.3

Insert a flat-bladed screwdriver into the position indicated by the arrows and remove the panel. Turn the speaker unit to counter-clockwise direction while inserting a flat-bladed screwdriver into one of the hollows around speaker unit, and then remove the speaker unit. After replacing the speaker unit, install it turning to clockwise direction until "click" sound comes out.



Type.4



TOOLS

① Plastic head hammer
② (⊖) flat head screwdriver
③ Cut chisel

How to Remove the PANEL, FR

1. Insert the (⊖) flat head screwdriver tip into the gap between the PANEL, FR and the PANEL, SPKR. Tap the head of the (⊖) flat head screwdriver with the plastic hammer head, and create the clearance as shown in Fig-1.

2. Insert the cut chisel in the clearance, and tap the head of the cut chisel with plastic hammer as shown in Fig-2, to remove the PANEL, FR.

3. Place the speaker horizontally. Tap head of the cut chisel with plastic hammer as shown in Fig-3, and remove the PANEL, FR completely.

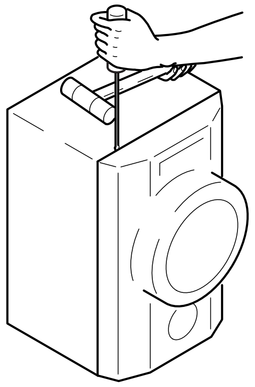


Fig-1

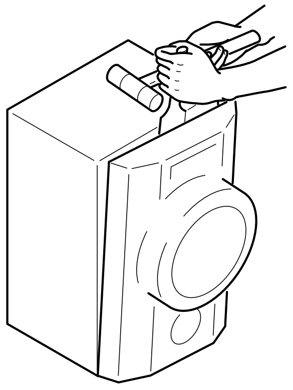


Fig-2

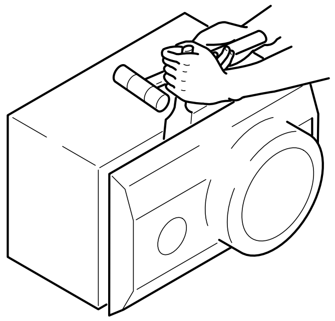


Fig-3

How to Attach the PANEL, FR

Attach the PANEL, FR to the PANEL, SPKR. Tap the four corners of the PANEL, FR with the plastic hammer to fit the PANEL, FR into the PANEL, SPKR completely.

SPEAKER PARTS LIST <SX-WZL700 (YUSL), SX-WZL800 (YLSL)>

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	8A-MS3-001-010		PANEL,FR
2	8A-MS3-002-010		PANEL,TW
3	8A-MS3-003-010		PANEL,BA
4	8A-MS3-004-010		PLATE,NAME
5	8A-MS3-006-010		GRILLE,FRAME ASSY
6	8A-MS3-010-010		PROTECTOR
7	8A-MS3-013-010		PANEL,BA B
8	8A-MS3-603-010		SPKR,M 120
9	88-MS1-608-010		SPKR, CERAMIC
10	88-NS5-611-010		CORD,SPKR B/L
11	88-MS1-610-010		CORD,SPKR
12	8Z-MS1-601-010		SPKR, W200 WZL90

ACCESSORIES / PACKAGE LIST

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	8A-MA3-902-010		IB,LH (ESP) M<LH>
1	8A-MA3-903-010		IB,U (ESP) M<U>
2	87-043-115-010		ANT,FEEDER FM
3	87-099-789-010		PLUG,ADPTR IR44<LH>
4	87-A90-030-010		ANT,LOOP AM-NC C
5	8Z-MA1-702-010		RC UNIT,ZAS12

アイワ株式会社 〒110-8710 東京都台東区池之端1-2-11 ☎03(3827)3111（代表）
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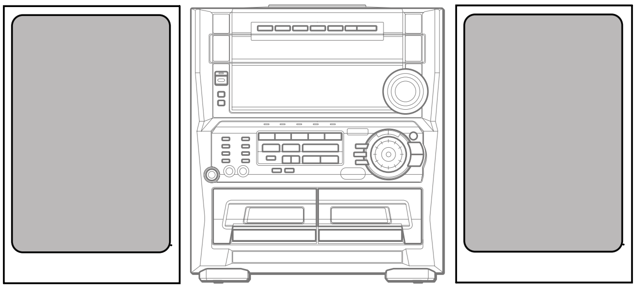
SERVICE

Z-L700 EZ,K



SERVICE MANUAL

COMPACT DISC STEREO
CASSETTE RECEIVER

BASIC TAPE MECHANISM : 2ZM-3MK2 PR5NM
BASIC CD MECHANISM : 6ZG-1 ZRDM

SYSTEM	CD CASSEIVER	SPEAKER	REMOTE CONTROLLER
Z-L700	CX-ZL700	SX-WZL700	RC-ZAS12

- This Service Manual is the “Revision Publishing” and replaces “Simple Manual” Z-L700 (EZ,K), (S/M Code No. 09-003-422-7R1).
- If requiring information about the CD mechanism, see Service Manual of 6ZG-1, (S/M Code No. 09-001-338-7N2).

REVISION
DATA

aiwa

S/M Code No. 09-006-422-7R2

SPECIFICATIONS

<FM tuner section>

Tuning range	87.5 MHz to 108 MHz
Usable sensitivity (IHF)	13.2 dBf
Antenna terminals	75 ohms (unbalanced)

<MW tuner section>

Tuning range	530 kHz to 1710 kHz (10 kHz step) 531 kHz to 1602 kHz (9 kHz step)
Usable sensitivity	350 µV/m
Antenna	Loop antenna

<LW tuner section>

Tuning range	144 kHz to 290 kHz
Usable sensitivity	1400 µV/m
Antenna	Loop antenna

<Amplifier section>

Mid-high frequency amplifier	
Power output	Rated : 32 W + 32 W (1 kHz, T.H.D. 1 %, 8 ohms) Reference : 40 W + 40 W (8 ohms, T.H.D. 10 %, 1 kHz) DIN MUSIC POWER : 80 W + 80 W
Total harmonic distortion	0.15 % (15 W, 1 kHz, 8 ohms, DIN AUDIO)
Low frequency amplifier	
Power output	Rated : 96 W + 96 W (75 Hz, T.H.D. 1 %, 6 ohms) Reference : 120 W + 120 W (75 Hz, T.H.D. 10 %, 6 ohms) DIN MUSIC POWER : 220 W + 220 W
Total harmonic distortion	0.15 % (45 W, 75 Hz, 6 ohms, DIN AUDIO)
Inputs	VIDEO / AUX IN : 310 mV (adjustable) PHONO : 400 mV (47 kohms) MIC 1,MIC 2 : 1.4 mV (20 kohms)
Outputs	CD DIGITAL OUT (OPTICAL) SPEAKERS HIGH FREQ : accept speakers of 8 ohms or more SPEAKERS LOW FREQ : accept speakers of 6 ohms or more SURROUND SPEAKERS : accept speakers of 8 – 16 ohms or more PHONES (stereo jack) : accepts headphones of 32 ohms or more

<Compact disc player section>

Laser	Semiconductor laser (λ = 780 nm)
D-A converter	1 bit dual
Signal-to-noise ratio	85 dB (1 kHz, 0 dB)
Harmonic distortion	0.05 % (1 kHz, 0 dB)
Wow and flutter	Unmeasurable

<Cassette deck section>

Track format	4 tracks, 2 channels stereo
Frequency response	CrO_2 tape : 50 Hz – 16000 Hz Normal tape : 50 Hz – 15000 Hz
Signal-to-noise ratio	50 dB (CrO_2 tape peak level, above 400 Hz)
Recording system	AC bias
Heads	Deck 1 : Playback head x 1 Deck 2 : Recording / Playback / erase head x 1

<Speaker system SX–WZL700>

Cabinet type	3 way, built-in subwoofer
Speakers	Subwoofer : 200 mm ($7\frac{7}{8}$ in.) cone type Full range : 120 mm ($4\frac{3}{4}$ in.) cone type Super tweeter: 60 mm ($2\frac{3}{8}$ in.) ceramic type
Impedance	6 ohms / 8 ohms
Output sound pressure level	88 dB/W/m
Dimensions (W x H x D)	260 x 495 x 355 mm ($10\frac{1}{4}$ x $19\frac{1}{2}$ x 14 in.)
Weight	8.5 kg (18 lbs 12 oz.)

<General>

Power requirements	230 V AC, 50 Hz
Power consumption	240 W
Dimensions of main unit (W x H x D)	360 x 395.3 x 402.3 mm ($14\frac{1}{4}$ x $15\frac{5}{8}$ x $15\frac{7}{8}$ in.)
Weight of main unit	12.7 kg (28 lbs)

- Design and specifications are subject to change without notice.

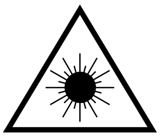
- The word "BBE"and the "BBE symbol" are trademarks of BBE Sound, Inc.
  Under license from BBE Sound,Inc.

PROTECTION OF EYES FROM LASER BEAM DURING SERVICING

This set employs laser. Therefore, be sure to follow carefully the instructions below when servicing.

WARNING!!

WHEN SERVICING, DO NOT APPROACH THE LASER EXIT WITH THE EYE TOO CLOSELY. IN CASE IT IS NECESSARY TO CONFIRM LASER BEAM EMISSION. BE SURE TO OBSERVE FROM A DISTANCE OF MORE THAN 30cm FROM THE SURFACE OF THE OBJECTIVE LENS ON THE OPTICAL PICK-UP BLOCK.



- ■ Caution: Invisible laser radiation when open and interlocks defeated avoid exposure to beam.
- ■ Advarsel: Usynlig laserståling ved åbning, når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling.

VAROITUS!

Laiteen Käyttäminen muulla kuin tässä käyttöohjeessa mainitulla tavalla saataa altistaa käyt-täjän turvallisuusluokan 1 ylittävälle näkymättömälle lasersäteilylle.

VARNING!

Om apparaten används på annat sätt än vad som specificeras i denna bruksanvising, kan användaren utsättas för osynling laserstrålning, som överskrider gränsen för laserklass 1.

CAUTION

Use of controls or adjustments or performance of procedures other than those specified herin may result in hazardous radiation exposure.

ATTENTION

L'utillisation de commandes, réglages ou procédures autres que ceux spécifiés peut entraîner une dangereuse exposition aux radiations.

ADVARSEL

Usynlig laserståling ved åbning, når sikkerhedsafbrydereer ude af funktion. Undgå udsættelse for stråling.

This Compact Disc player is classified as a CLASS 1 LASER product.
The CLASS 1 LASER PRODUCT label is located on the rear exterior.

CLASS 1	LASER PRODUCT
KLASSE 1	LASER PRODUKT
LUOKAN 1	LASER LAITE
KLASS 1	LASER APPARAT

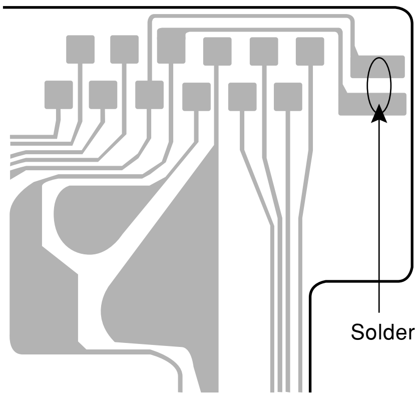
Precaution to replace Optical block

(KSS-213F)

Body or clothes electrostatic potential could ruin laser diode in the optical block. Be sure ground body and workbench, and use care the clothes do not touch the diode.

1) After the connection, remove solder shown in right figure.

PICK-UP Assy P.C.B



NOTE ON BEFORE STARTING REPAIR

1. Forced discharge of electrolytic capacitor of power supply block

When repair is going to be attempted in the set that uses relay circuit in the power supply block, electric potential is kept charged across the electrolytic capacitors (C101, 102) even though AC power cord is removed. If repair is attempted in this condition, secondary defect can occur.
In order to prevent the secondary trouble, perform the following measures before starting repair work.

Discharge procedure

① Remove the AC power cord.
② Connect a discharging resistor at an end of lead wire that has clips at both ends. Connect the other end of the lead wire to metal chassis.
③ Contact the other end of the discharging resistor to the positive (+) side (+VH) of C101. (For two seconds)
④ Contact the same end of the discharging resistor as step ③ to the negative (-) side (-VH) of C102 in the same way. (For two seconds)
⑤ Check that voltage across C101 and C102 has decreased to 1 V or less using a multimeter or an oscilloscope.

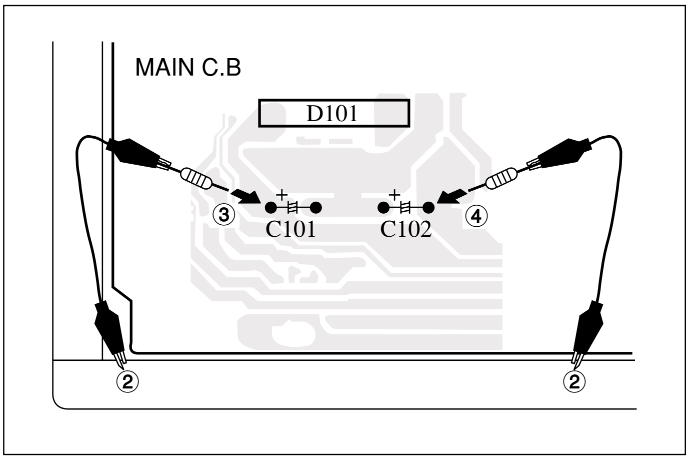


Fig-1

Select a discharging resistor referring to the following table.

Charging voltage (V) (C101, 102)	Discharging resistor (Ω)	Rated power (W)	Parts number
25-48	100	3	87-A00-247-090
49-140	220	5	87-A00-232-090

Note: The reference numbers (C101, C102) of the electrolytic capacitors can change depending on the models. Be sure to check the reference numbers of the charging capacitors on schematic diagram before starting the discharging work.

2. Check items before exchanging the MICROCOMPUTER

Be sure to check the following items before exchanging the MICROCOMPUTER. Exchange the MICROCOMPUTER after confirming that the MICROCOMPUTER is surely defective.

2-1. Regarding the HOLD terminal of the MICROCOMPUTER

When the HOLD terminal (INPUT) of the MICROCOMPUTER is “H”, the MICROCOMPUTER is judged to be operating correctly. When this terminal is “L”, the main power cannot be turned on. Therefore, be sure to check the terminal voltage of the HOLD terminal before exchange.
When the MICROCOMPUTER is not defective, the HOLD terminal can also go “L” when the POWER AMPLIFIER has any abnormalities that triggers the abnormality detection circuit on the MAIN C. B. that sets the HOLD terminal to “L”.

- Good or no good judgement of the MICROCOMPUTER

① Turn on the AC main power.
② Confirm that the main power is turned on and the HOLD terminal of the MICROCOMPUTER keeps the “H” level or not.
③ When the HOLD terminal is “L” level, the abnormality detection circuit is judged to be working correctly and the MICROCOMPUTER is judged to be good.

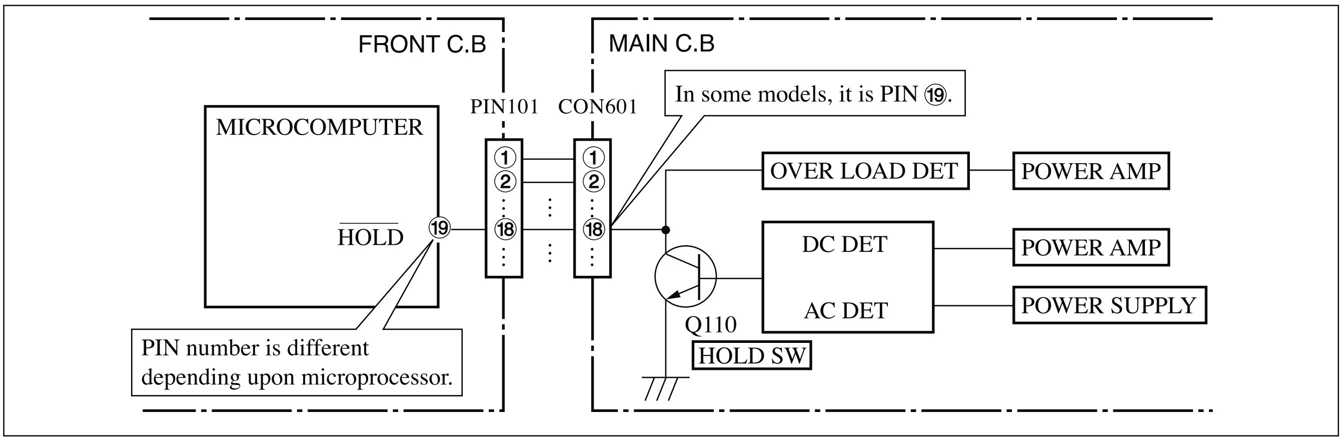


Fig-2-1

In such a case, check also if the POWER AMPLIFIER circuit or power supply circuit has any abnormalities or not.

2-2. Regarding reset

There are cases that the machine does not work correctly because the MICROCOMPUTER is not reset even though the AC power cord is re-inserted, or the software reset (pressing the STOP key + POWER key) is performed.

When the above described phenomenon occurs, it can lead to wrong judgement as if the MICROCOMPUTER is defective and to exchange the MICROCOMPUTER. In such a case, perform the forced-reset by the following procedure and check good or no good of the MICROCOMPUTER.

① Remove the AC power cord.

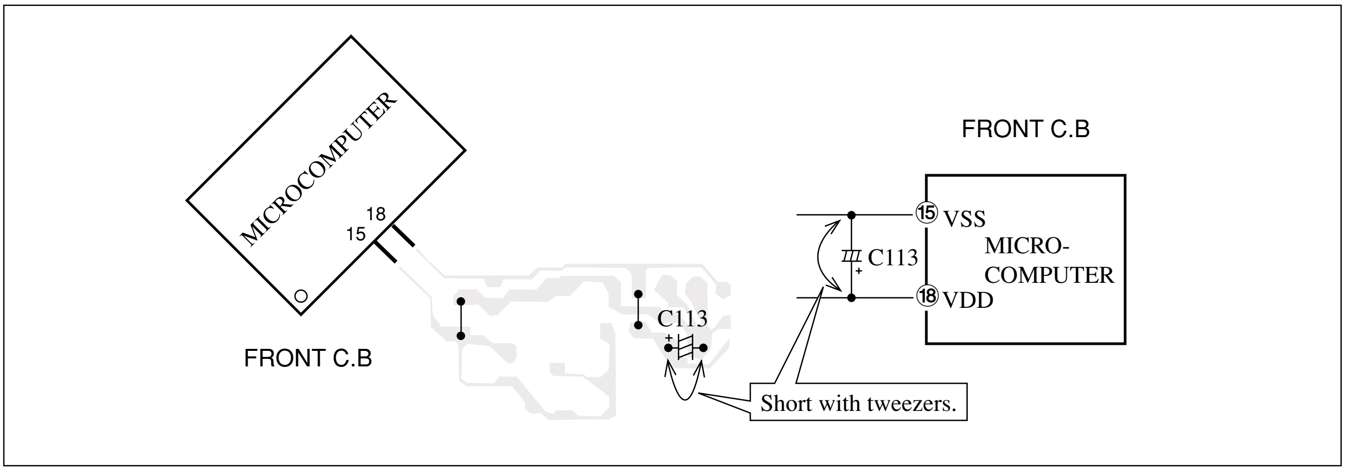


Fig-2-2

② Short both ends of the electrolytic capacitor C113 that is connected to VDD of the MICROCOMPUTER with tweezers.

③ Connect the AC power cord again. If the MICROCOMPUTER returns to the normal operation, the MICROCOMPUTER is good.

Note: The reference number or MICROCOMPUTER pin number of transistor (Q110) and electrolytic capacitor (C113) can change depending on the models. Be sure to check the reference numbers on schematic diagram before starting the discharging work.

2-3. Confirmation of soldering state of MICROCOMPUTER

Check the soldering state of the MICROCOMPUTER in addition to the above described procedures. Be sure to exchange the MICROCOMPUTER after surely confirming that the trouble is not caused by poor soldering but the MICROCOMPUTER itself.

ELECTRICAL MAIN PARTS LIST

IC

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
	8A-MA3-656-010		C-IC,LC876580W-5P55
	87-A21-418-010		IC,STK490-340
	87-A21-397-010		IC,STK490-070
	87-A21-021-040		C-IC,BU2099FV
	87-A20-783-040		C-IC,BA7762AFS
	87-A21-577-040		C-IC,M61506FP
	87-A21-482-010		IC,RPM6938-H4
	87-A21-018-040		C-IC,M65849BFP631D
	87-A21-452-030		C-IC,BD3876KS2
	87-070-289-040		IC,BU 2092F
	87-A21-415-010		IC,LA1843
	87-A21-051-040		C-IC,BU9990-03FS
	87-070-127-110		IC,LC72131 D
	87-020-454-010		IC,DN6851
	87-A20-440-040		C-IC,BU1920FS

TRANSISTOR

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
	87-026-609-080		TR,KTA1266GR
	87-026-610-080		TR,KTC3198GR
	87-A30-076-080		C-TR,2SC3052F
	87-A30-075-080		C-TR,2SA1235F
	87-A30-318-080		TR,CSA952K
	89-213-702-010		TR,2SB1370E
	87-A30-218-080		TR,2SB1237Q
	87-A30-257-080		C-TR,2SD1306E
	87-A30-107-070		C-TR,CMBT5401
	87-026-245-080		TR,DTC114ES
	87-A30-198-080		TR,KTC3199GR
	87-A30-484-080		C-TR,KRA 102S
	87-A30-269-040		C-FET,2SJ461-T1
	87-A30-086-070		C-TR,CSD1360E
	87-A30-087-080		C-FET,2SK2158
	87-A30-468-080		C-TR,KRC 102S-RTK
	87-A30-106-070		C-TR,CMBT5551
	87-A30-329-080		TR,CD1585BC
	87-A30-063-080		C-TR,KRA 104S
	89-503-602-080		C-FET,2SK360E
	89-327-143-080		TR,2SC2714O
	87-A30-489-080		C-TR,KRA107S
	87-A30-234-080		TR,CSC4115BC
	87-026-463-080		TR,2SA933SRS

DIODE

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
	87-020-465-080		DIODE,1SS133
	87-A40-673-090		DIODE,D10XB20
	87-A40-553-080		DIODE,1N4003 LES
	87-A40-780-080		ZENER,UZ33BSD
	87-A40-764-080		ZENER,UZ10BSC
	87-A40-313-080		C-DIODE,MC 2840
	87-A40-270-080		C-DIODE,MC2838
	87-A40-269-080		C-DIODE,MC2836
	87-A40-768-080		ZENER,UZ 16BSA
	87-017-447-010		DIODE,GBU4DL-6419
	87-017-154-080		ZENER,HZS6C3L
	87-020-331-080		CHIP-DIODE,DAN202K
	87-017-654-060		DIODE,GBU6JL6131
	87-A40-751-080		ZENER,UZ6.2BSB
	87-A40-747-080		ZENER,UZ5.1BSB
	87-A40-438-080		ZENER,MTZJ4.7A
	87-017-149-080		ZENER,HZS6A2L

MAIN C.B

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C3	87-A10-712-080		C-CAP,S 0.22-50 F
C4	87-A10-712-080		C-CAP,S 0.22-50 F
C21	87-016-035-090		CAP, E 6800-35 VR
C22	87-016-035-090		CAP, E 6800-35 VR
C25	87-016-300-080		CAP, ELECT 22-100
C26	87-016-300-080		CAP, ELECT 22-100
C27	87-016-300-080		CAP, ELECT 22-100
C28	87-016-300-080		CAP, ELECT 22-100
C31	87-010-263-080		CAP, ELECT 100-10V
C32	87-010-197-080		CAP, CHIP 0.01-25
C34	87-010-247-080		CAP, ELECT 100-50V
C35	87-010-406-080		CAP, ELECT 22-50V
C36	87-010-381-080		CAP, ELECT 330-16V
C38	87-010-394-080		CAP, ELECT 220-35V
C39	87-010-394-080		CAP, ELECT 220-35V
C40	87-010-197-080		CAP, CHIP 0.01-25
C60	87-010-403-080		CAP, ELECT 3.3-50V
C61	87-010-260-080		CAP, ELECT 47-25V
C80	87-010-401-080		CAP, ELECT 1-50V
C81	87-010-374-080		CAP, ELECT 47-10V
C82	87-010-380-080		CAP, ELECT 47-16V
C104	87-010-196-080		CHIP CAPACITOR,0.1-25
C105	87-010-196-080		CHIP CAPACITOR,0.1-25
C111	87-010-401-080		CAP, ELECT 1-50 M
C112	87-010-401-080		CAP, ELECT 1-50 M
C113	87-010-545-080		CAP, ELECT 0.22-50V
C114	87-010-545-080		CAP, ELECT 0.22-50V
C115	87-010-546-080		CAP, ELECT 0.33-50V
C116	87-010-546-080		CAP, ELECT 0.33-50V
C117	87-010-196-080		CHIP CAPACITOR,0.1-25
C121	87-010-404-080		CAP, ELECT 4.7-50V
C122	87-010-404-080		CAP, ELECT 4.7-50V
C160	87-010-196-080		CHIP CAPACITOR,0.1-25
C161	87-012-280-080		C-CAP,S U 3300P-50 KB
C162	87-012-280-080		C-CAP,S U 3300P-50 KB
C171	87-012-368-080		C-CAP,S 0.1-50 F
C172	87-012-368-080		C-CAP,S 0.1-50 F
C173	87-012-368-080		C-CAP,S 0.1-50 F
C174	87-012-368-080		C-CAP,S 0.1-50 F
C175	87-012-280-080		C-CAP,S U 3300P-50 KB
C176	87-012-280-080		C-CAP,S U 3300P-50 KB
C301	87-010-318-080		C-CAP,S 47P-50 CH
C302	87-010-318-080		C-CAP,S 47P-50 CH
C303	87-012-157-080		C-CAP,S 330P-50 CH
C304	87-012-157-080		C-CAP,S 330P-50 CH
C305	87-012-157-080		C-CAP,S 330P-50 CH
C306	87-012-157-080		C-CAP,S 330P-50 CH
C307	87-010-196-080		CHIP CAPACITOR,0.1-25
C309	87-010-196-080		CHIP CAPACITOR,0.1-25
C310	87-010-196-080		CHIP CAPACITOR,0.1-25
C311	87-010-198-080		CAP, CHIP 0.022-25
C312	87-010-198-080		CAP, CHIP 0.022-25
C313	87-010-178-080		CHIP CAP 1000P-50
C314	87-010-178-080		CHIP CAP 1000P-50
C315	87-010-178-080		CHIP CAP 1000P-50
C316	87-010-178-080		CHIP CAP 1000P-50
C321	87-012-142-080		CAP, S 0.33-16
C322	87-012-142-080		CAP, S 0.33-16
C324	87-010-260-080		CAP, ELECT 47-25V
C325	87-010-370-080		CAP,E 330-6.3 SME
C327	87-010-404-080		CAP, ELECT 4.7-50V
C328	87-010-404-080		CAP, ELECT 4.7-50V
C332	87-010-196-080		CHIP CAPACITOR,0.1-25
C335	87-010-401-080		CAP, ELECT 1-50V
C336	87-010-401-080		CAP, ELECT 1-50V
C337	87-010-196-080		CHIP CAPACITOR,0.1-25
C339	87-010-196-080		CHIP CAPACITOR,0.1-25
C340	87-010-196-080		CHIP CAPACITOR,0.1-25
C351	87-012-140-080		CAP 470P-50
C352	87-012-140-080		CAP 470P-50
C354	87-010-175-080		CAP 560P-50
C355	87-010-178-080		C-CAP,S 1000P-50 KB
C356	87-010-260-080		CAP, ELECT 47-25V
C357	87-010-197-080		CAP, CHIP 0.01-25 KB

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C358	87-010-183-080		C-CAP,S 2700P-50 B
C359	87-010-183-080		C-CAP,S 2700P-50 B
C360	87-010-183-080		C-CAP,S 2700P-50 B
C370	87-010-196-080		CHIP CAPACITOR,0.1-25
C373	87-A11-177-080		C-CAP,S 0.15-16 K B
C374	87-A11-177-080		C-CAP,S 0.15-16 K B
C378	87-010-196-080		CHIP CAPACITOR,0.1-25 ZF
C379	87-010-406-080		CAP, ELECT 22-50
C380	87-010-406-080		CAP, ELECT 22-50
C386	87-010-196-080		CHIP CAPACITOR,0.1-25 ZF
C388	87-012-156-080		C-CAP,S 220P-50 J CH
C391	87-010-319-080		C-CAP,S 56P-50 J CH
C392	87-010-319-080		C-CAP,S 56P-50 J CH
C393	87-010-319-080		C-CAP,S 56P-50 J CH
C394	87-010-319-080		C-CAP,S 56P-50 J CH
C395	87-010-197-080		CHIP CAPACITOR,0.1-25 K B
C501	87-010-263-080		CAP, ELECT 100-10V
C502	87-010-196-080		CHIP CAPACITOR,0.1-25
C503	87-016-460-080		C-CAP,S 0.22-16 K B
C504	87-016-460-080		C-CAP,S 0.22-16 K B
C505	87-016-460-080		C-CAP,S 0.22-16 K B
C506	87-010-184-080		CHIP CAPACITOR 3300P-50
C507	87-010-177-080		C-CAP,S 820P-50 SL
C508	87-016-669-080		C-CAP,S 0.1-25 K B
C509	87-016-669-080		C-CAP,S 0.1-25 K B
C510	87-010-184-080		CHIP CAPACITOR 3300P-50
C511	87-010-177-080		C-CAP,S 820P-50 SL
C512	87-016-460-080		C-CAP,S 0.22-16 K B
C513	87-010-544-080		CAP, ELECT 0.1-50V
C514	87-010-374-080		CAP, ELECT 47-10V
C515	87-010-401-080		CAP, ELECT 1-50 M
C516	87-010-401-080		CAP, ELECT 1-50 M
C517	87-010-183-080		C-CAP,S 2700P-50 B
C518	87-010-183-080		C-CAP,S 2700P-50 B
C531	87-010-405-080		CAP, ELECT 10-50 M
C532	87-010-196-080		CHIP CAPACITOR,0.1-25
C533	87-010-196-080		CHIP CAPACITOR,0.1-25
C534	87-012-156-080		C-CAP,S 220P-50 CH
C535	87-010-178-080		CHIP CAP 1000P-50
C536	87-010-196-080		CHIP CAPACITOR,0.1-25
C537	87-010-318-080		C-CAP,S 47P-50 CH
C538	87-010-318-080		C-CAP,S 47P-50 CH
C539	87-010-318-080		C-CAP,S 47P-50 CH
C541	87-010-178-080		CHIP CAP 1000P-50
C611	87-010-956-080		CHIP-CAP,S 0.068-25B
C612	87-010-369-080		C-CAP,S 0.033-25 K B
C613	87-010-190-080		S CHIP F 0.01-50
C614	87-016-669-080		C-CAP,S 0.1-25 K B
C616	87-010-185-080		C-CAP,S 3900P-50 K B
C617	87-010-194-080		CAP, CHIP 0.047-25ZF
C618	87-010-401-080		CAP, ELECT 1-50V
C619	87-010-263-080		CAP, ELECT 100-10V
C620	87-016-669-080		C-CAP,S 0.1-25 K B
C621	87-010-197-080		CAP, CHIP 0.01-25 KB
C623	87-010-401-080		CAP, ELECT 1-50V
C624	87-010-401-080		CAP, ELECT 1-50V
C626	87-A11-590-080		CAP, CHIP 0.047-16 KB
C627	87-010-400-080		CAP, ELECT 0.47-50V
C628	87-010-400-080		CAP, ELECT 0.47-50V
C629	87-A11-590-080		CAP, CHIP 0.047-16 KB
C630	87-010-383-080		CAP, ELECT 33-25V
C631	87-010-185-080		C-CAP,S 3900P-50 K B
C632	87-010-185-080		C-CAP,S 3900P-50 K B
C634	87-010-196-080		CHIP CAPACITOR,0.1-25
C635	87-A10-307-080		CAP-M,S 0.1-50
C636	87-A10-307-080		CAP-M,S 0.1-50
C637	87-A10-307-080		CAP-M,S 0.1-50
C638	87-A10-307-080		CAP-M,S 0.1-50
C639	87-010-405-080		CAP, ELECT 10-50V
C643	87-010-196-080		CHIP CAPACITOR,0.1-25
C644	87-010-401-080		CAP, ELECT 1-50V
C671	87-010-322-080		C-CAP,S 100P-50 CH
C672	87-010-322-080		C-CAP,S 100P-50 CH
C673	87-010-190-080		C-CAP,S 0.01-50 ZF
C675	87-010-196-080		CHIP CAPACITOR,0.1-25
C679	87-010-196-080		CHIP CAPACITOR,0.1-25 ZF
C680	87-010-196-080		CHIP CAPACITOR,0.1-25 ZF
C682	87-010-196-080		CHIP CAPACITOR,0.1-25 ZF
C683	87-010-197-080		C-CAP,S 0.01-25 KB
C771	87-010-263-080		CAP, ELECT 100-10V
C772	87-010-197-080		CAP, CHIP 0.01-25KB
C779	87-010-971-080		C-CAP,S 4700P-50 J B
C780	87-010-971-080		C-CAP,S 4700P-50 J B
C782	87-010-197-080		CAP, CHIP 0.01-25KB
C783	87-010-197-080		CAP, CHIP 0.01-25KB
C784	87-010-197-080		CAP, CHIP 0.01-25KB
C785	87-010-197-080		CAP, CHIP 0.01-25KB
C786	87-010-197-080		CAP, CHIP 0.01-25KB
C788	87-010-149-080		C-CAP,S 5P-50 CH
C789	87-A10-801-080		C-CAP,S 0.022-16 J B
C790	87-A10-801-080		C-CAP,S 0.022-16 J B
C791	87-010-196-080		CHIP CAPACITOR,0.1-25
C792	87-010-197-080		CAP, CHIP 0.01-25KB
C793	87-010-404-080		CAP, ELECT 4.7-50V
C795	87-010-197-080		CAP, CHIP 0.01-25KB
C796	87-010-197-080		CAP, CHIP 0.01-25KB
C797	87-010-405-080		CAP, ELECT 10-50V
C798	87-010-197-080		CAP, CHIP 0.01-25KB
C799	87-010-407-080		CAP, ELECT 33-50V
C800	87-010-194-080		CAP, CHIP 0.047-25ZF
C801	87-010-403-080		CAP, ELECT 3.3-50V
C802	87-010-194-080		CAP, CHIP 0.047-25 ZF
C803	87-010-198-080		CAP, CHIP 0.022-25KB
C804	87-010-263-080		CAP, ELECT 100-10V
C807	87-010-400-080		CAP, ELECT 0.47-50V
C808	87-010-401-080		CAP, ELECT 1-50V
C809	87-010-401-080		CAP, ELECT 1-50V
C810	87-010-196-080		CHIP CAPACITOR,0.1-25
C811	87-010-403-080		CAP, ELECT 3.3-50V
C812	87-010-403-080		CAP, ELECT 3.3-50V
C814	87-010-197-080		CAP, CHIP 0.01-25
C815	87-010-403-080		CAP, ELECT 3.3-50V
C816	87-010-403-080		CAP, ELECT 3.3-50V
C818	87-010-180-080		C-CAP,S 1500P-50 KB
C819	87-010-179-080		CAP,CHIP S 1200P-50
C820	87-010-179-080		CAP,CHIP S 1200P-50
C821	87-010-405-080		CAP, ELECT 10-50V
C823	87-012-349-080		CAP, CHIP 1000P-50 J CH GRM
C824	87-010-405-080		CAP, ELECT 10-50
C825	87-010-596-080		CAP, S 0.047-16
C831	87-010-406-080		CAP,E 22-50 M 11L SME
C842	87-010-197-080		CAP, CHIP 0.01-25 KB
C844	87-010-197-080		CAP, CHIP 0.01-25 KB
C849	87-010-196-080		C-CAP,S 0.1-25 ZF
C850	87-010-260-080		CAP, ELECT 47-25V
C851	87-010-197-080		CAP, CHIP 0.01-25 KB
C852	87-010-197-080		CAP, CHIP 0.01-25 KB
C853	87-010-197-080		CAP, CHIP 0.01-25 KB
C858	87-010-196-080		CHIP CAPACITOR,0.1-25
C859	87-010-196-080		CHIP CAPACITOR,0.1-25
C860	87-010-197-080		CAP, CHIP 0.01-25
C869	87-010-197-080		C-CAP,S 0.1-25 KB
C871	87-012-156-080		C-CAP,S 220P-50 J CH GRM
C872	87-012-156-080		C-CAP,S 220P-50 J CH GRM
C873	87-012-140-080		C-CAP,S 470P-50 J CH
C874	87-010-405-080		CAP,E 10-50 M 11L SME
C875	87-010-196-080		C-CAP,S 0.1-25 ZF
C877	87-010-197-080		C-CAP,S 0.1-25 KB
C878	87-010-316-080		C-CAP,S 33P-50 J CH GRM
C879	87-010-314-080		C-CAP,S 22P-50 J CH GRM

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C940	87-010-197-080		C-CAP,S 0.1-25 KB
C942	87-010-149-080		C-CAP,S 5P-50 J CH GRM
C947	87-010-197-080		C-CAP,S 0.1-25 KB
C948	87-012-140-080		C-CAP,S 470P-50 J CH
C952	87-010-197-080		C-CAP,S 0.1-25 KB
C957	87-010-311-080		C-CAP,S 12P-50 J CH GRM
C958	87-010-197-080		C-CAP,S 0.1-25 KB
C959	87-010-196-080		CHIP CAPACITOR,0.1-25
C960	87-010-196-080		CHIP CAPACITOR,0.1-25
C962	87-010-401-080		CAP,E 1-50 M 11L SME
C963	87-015-785-080		CHIP CAPACITOR, 0.1-25ZF
C971	87-010-381-080		CAP, ELECT 330-16V
C972	87-010-404-080		CAP, ELECT 4.7-50V
C973	87-010-197-080		CAP, CHIP 0.01-25KB
C974	87-010-197-080		CAP, CHIP 0.01-25KB
C979	87-010-322-080		C-CAP,S 100P-50 CH
C981	87-010-260-080		CAP, ELECT 47-25V
C982	87-010-196-080		CHIP CAPACITOR,0.1-25
C983	87-010-197-080		CAP, CHIP 0.01-25KB
C984	87-010-197-080		CAP, CHIP 0.01-25KB
C985	87-010-322-080		C-CAP,S 100P-50 J CH GRM
C987	87-010-197-080		CAP, CHIP 0.01-25KB
C989	87-010-197-080		CAP, CHIP 0.01-25KB
C991	87-010-312-080		C-CAP,S 15P-50 CH
C992	87-010-312-080		C-CAP,S 15P-50 CH
C993	87-010-178-080		CHIP CAP 1000P-50
C995	87-010-178-080		CHIP CAP 1000P-50
C997	87-010-196-080		CHIP CAPACITOR,0.1-25
C998	87-010-260-080		CAP, ELECT 47-25V
C999	87-A11-155-080		CAP,TC U 0.01-16 Z F
CF831	87-008-423-010		FILTER, CF SFE10.7MS3G-A
CF832	82-785-747-010		CF MS2 GHY,R
CN1	87-A60-996-010		CONN,13P V BLK TAC-L13X-A3
CN91	87-A60-109-010		CONN,2P V S2M-2W
CN101	87-A60-996-010		CONN,13P V BLK TAC-L13X-A3
CN301	87-A60-620-010		CONN,3P V 2MM JMT
CN351	87-A60-625-010		CONN,8P V 2MM JMT
CN601	87-099-719-010		CONN,30P TYK-B(X)
CN602	87-A60-131-010		CONN,6P V FE
CNA1	8A-NF8-653-010		CONN ASSY,9P TID-A(480)
CNA2	8A-NF6-640-010		CONN ASSY,3P (VM) ANF-6
FB161	87-003-223-080		F-BEAD, BL02RN2
FB162	87-003-223-080		F-BEAD, BL02RN2
FB301	87-A90-896-080		F-BEAD, 035600STY7
FB501	87-008-372-080		FILTER, EMI BL OIRNI
FC602	88-906-321-110		FF-CABLE,6P 1.25 320MM
FFE831	A8-6ZA-191-130		6ZA-1 FEENM
J101	87-A60-483-010		JACK,DIA6.3 BLK ST W/S KM
J102	87-A60-238-010		TERMINAL,SP 4P
J603	87-A60-926-010		JACK,PIN 4P R/W/TC58-118
J832	87-A60-403-010		TERMINAL,ANT 2P HSP-312V05
JR301	83-XM1-617-080		C-COIL,BK2125HM601
JR302	83-XM1-617-080		C-COIL,BK2125HM601
JR340	83-XM1-617-080		C-COIL,BK2125HM601
JW411	87-003-216-080		F-BEAD, -3.6-5 BL01RN1-A62T5
JW416	87-A90-896-080		F-BEAD, 035600STY7
JW625	87-A90-896-080		F-BEAD, 035600STY7
JW646	87-A90-896-080		F-BEAD, 035600STY7
JW659	87-A90-896-080		F-BEAD, 035600STY7
JW991	87-A90-896-080		F-BEAD, 035600STY7
L101	87-A50-610-010		COIL,1UH K (MDEC)
L102	87-A50-610-010		COIL,1UH K (MDEC)
L301	87-A50-049-010		COIL,TRAP 85K(COI)
L302	87-A50-049-010		COIL,TRAP 85K(COI)
L351	87-007-342-010		COIL,OSC 85K BIAS
L801	87-A50-540-010		COIL,FM DET(TOK)
L802	87-A91-551-010		FLTR,PCFJZH-450 L(TOK)
L811	87-005-847-080		COIL,2.2UH(CECS)
L832	87-005-847-080		COIL,2.2UH(CECS)
L951	8A-NF8-668-010		COIL,AM PACK 2(TOK)

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
R117	87-010-805-080		C-CAP,S 1-16 ZF
R118	87-010-805-080		C-CAP,S 1-16 ZF
R161	87-A00-441-050		RES,270-1/2W J RP
R162	87-A00-441-050		RES,270-1/2W J RP
R163	87-A00-441-050		RES,270-1/2W J RP
R164	87-A00-441-050		RES,270-1/2W J RP
R671	83-XM1-617-080		C-COIL,BK2125HM601
R672	83-XM1-617-080		C-COIL,BK2125HM601
R790	87-010-197-080		C-CAP,S 0.01-25 KB
R991	87-010-322-080		C-CAP,S 100P-50 J CH
R993	87-010-322-080		C-CAP,S 100P-50 J CH
R995	87-010-322-080		C-CAP,S 100P-50 J CH
SFR351	87-A90-433-080		SFR,50K H NVZ6TLTA
SFR352	87-A90-433-080		SFR,50K H NVZ6TLTA
TC942	87-011-253-080		TRIMMER,CER 30P 4.0X4.5 ECRLA
WH1	87-A90-510-010		HLDR,WIRE 2.5-9P
X861	87-A70-091-010		VIB,XTAL 4.332MHZ CSA-309
X991	87-A70-061-010		VIB,XTAL 4.500MHZ CSA-309

MICON C.B

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C101	87-010-498-040		CAP,E 10-16 GAS
C102	87-010-194-080		CAP, CHIP 0.047-25
C103	87-010-194-080		CAP, CHIP 0.047-25
C105	87-A11-242-040		CAP,E 220-10 M 5L SRM
C106	87-A11-242-040		CAP,E 220-10 M 5L SRM
C107	87-010-196-080		CHIP CAPACITOR,0.1-25
C111	87-016-460-080		C-CAP,S 0.22-16 K B
C112	87-010-493-040		CAP,E 0.47-50 GAS
C113	87-010-178-080		CHIP CAP 1000P-50
C114	87-018-209-080		CAP,TC U 0.01-50
C116	87-010-196-080		CHIP CAPACITOR,0.1-25
C122	87-012-369-080		C-CAP,S 0.047-50F
C123	87-010-408-040		CAP,E 47-50 SME
C124	87-010-421-040		CAP,E 4.7-50 5L
C125	87-010-421-040		CAP,E 4.7-50 5L
C132	87-012-156-080		C-CAP,S 220P-50 CH
C133	87-010-316-080		C-CAP,S 33P-50 CH
C134	87-010-178-080		C-CAP,S 1000P-50 K B
C135	87-018-209-080		CAP, TC U 0.01-50
C137	87-010-313-080		CAP, CHIP 18P-50
C138	87-010-196-080		CHIP CAPACITOR,0.1-25
C171	87-010-213-080		C-CAP,S 0.015-50 B
C172	87-010-183-080		C-CAP,S 2700P-50 B
C188	87-010-194-080		CAP, CHIP 0.047-25
C193	87-010-197-080		CAP, CHIP 0.01 DM
C251	87-010-196-080		CHIP CAPACITOR,0.1-25
C252	87-012-156-080		C-CAP,S 220P-50 CH
C253	87-010-322-080		C-CAP,S 100P-50 CH
C301	87-010-195-080		C-CAP,S 0.068-25 ZF
C302	87-010-171-080		C-CAP,S 270P-50 J SL
C303	87-012-358-080		C-CAP,S 0.47-10 F Z
C304	87-012-358-080		C-CAP,S 0.47-10 F Z
C305	87-010-196-080		CHIP CAPACITOR,0.1-25
C306	87-010-196-080		CHIP CAPACITOR,0.1-25
C310	87-010-196-080		CHIP CAPACITOR,0.1-25
C311	87-010-405-040		CAP,E 10-50
C411	87-012-157-080		C-CAP,S 330P-50 CH
C412	87-010-405-040		CAP,E 10-50
C421	87-010-197-080		CAP, CHIP 0.01-25
C422	87-010-182-080		C-CAP,S 2200P-50 B
C940	87-012-145-080		CAP, CHIP S 270P-50 J CH
C941	87-012-145-080		CAP, CHIP S 270P CH
C942	87-012-145-080		CAP, CHIP S 270P CH
C943	87-012-145-080		CAP, CHIP S 270P CH
C944	87-012-145-080		CAP, CHIP S 270P CH
C945	87-012-145-080		CAP, CHIP S 270P CH
C946	87-012-145-080		CAP, CHIP S 270P CH
C947	87-012-145-080		CAP, CHIP S 270P CH
C948	87-012-145-080		CAP, CHIP S 270P CH

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C949	87-012-145-080		CAP, CHIP S 270P CH
C950	87-012-145-080		CAP, CHIP S 270P CH
C951	87-012-145-080		CAP, CHIP S 270P CH
C952	87-012-145-080		CAP, CHIP S 270P CH
CN101	87-099-720-010		CONN,30P TYK-B(P)
CN102	87-A60-162-010		CONN,14P H FE
CN103	87-A60-166-010		CONN,18P H FE
CN104	87-A60-163-010		CONN,15P H FE
CN301	87-A60-156-010		CONN,8P H FE
CNA105	8A-MA3-654-010		CONN ASSY,2P V 200MM
FB001	87-A90-896-080		F-BEAD,035600STY7
FC102	88-914-231-110		FF-CABLE,14P 1.25
FC103	88-918-151-110		FF-CABLE,18P 1.25
FC104	88-915-151-110		FF-CABLE,15P 1.25 150MM
FL101	8A-MA3-651-010		FL,BJ751GNK
L101	87-A50-333-010		COIL,OSC 9.43MHZ
LED131	87-A40-317-080		LED,SLR-342VCT31 RED
LED201	87-A40-496-040		LED,SLR-342PCT31 GRN
LED202	87-A40-317-080		LED,SLR-342VCT31 RED
LED203	87-A40-496-040		LED,SLR-342PCT31 GRN
LED205	87-A40-317-080		LED,SLR-342VCT31 RED
LED206	87-A40-496-040		LED,SLR-342PCT31 GRN
LED207	87-A40-317-080		LED,SLR-342VCT31 RED
LED209	87-A40-496-040		LED,SLR-342PCT31 GRN
LED210	87-A40-317-080		LED,SLR-342VCT31 RED
LED211	87-A40-496-040		LED,SLR-342PCT31 GRN
LED212	87-A40-317-080		LED,SLR-342VCT31 RED
LED213	87-A40-317-080		LED,SLR-342VCT31 RED
LED214	87-A40-317-080		LED,SLR-342VCT31 RED
S401	87-A90-095-080		SW,TACT EVQ11G04M
S402	87-A90-095-080		SW,TACT EVQ11G04M
S403	87-A90-095-080		SW,TACT EVQ11G04M
S404	87-A90-095-080		SW,TACT EVQ11G04M
S405	87-A90-095-080		SW,TACT EVQ11G04M
S421	87-A91-625-010		SW,RTRY EC12E24308-30MM

CNTL C.B

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C602	87-010-069-040		CAP,E 0.33-50
C603	87-010-319-080		C-CAP,S 56P-50 CH
C604	87-010-178-080		CHIP CAP 1000P-50
C606	87-015-785-080		CHIP CAPACITOR, 0.1-25
C607	87-010-060-040		CAP,E 100-16
C611	87-010-186-080		CAP,CHIP 4700P-50
C612	87-015-699-040		CAP,E 10-50
C651	87-010-182-080		C-CAP,S 2200P-50 B
C652	87-010-197-080		CAP, CHIP 0.01-25
C661	87-010-196-080		CHIP CAPACITOR,0.1-25
C662	87-010-196-080		CHIP CAPACITOR,0.1-25
C663	87-012-156-080		C-CAP,S 220P-50 CH
C664	87-012-156-080		C-CAP,S 220P-50 CH
C686	87-010-196-080		CHIP CAPACITOR,0.1-25
C692	87-010-196-080		CHIP CAPACITOR,0.1-25
C846	87-010-196-080		CHIP CAPACITOR,0.1-25
CN661	87-A60-166-010		CONN,18P H FE
CNA602	8A-MA3-655-010		CONN ASSY,2P V 60MM
LED671	87-A40-317-080		LED,SLR-342VCT31 RED
LED672	87-A40-317-080		LED,SLR-342VCT31 RED
LED673	87-A40-317-080		LED,SLR-342VCT31 RED
LED674	87-A40-317-080		LED,SLR-342VCT31 RED
LED675	87-A40-317-080		LED,SLR-342VCT31 RED
LED677	87-A40-317-080		LED,SLR-342VCT31 RED
LED678	87-A40-317-080		LED,SLR-342VCT31 RED
LED679	87-A40-317-080		LED,SLR-342VCT31 RED
LED680	87-A40-619-040		LED,SLR-56PT-T31-W GRN
LED681	87-A40-619-040		LED,SLR-56PT-T31-W GRN
LED682	87-A40-619-040		LED,SLR-56PT-T31-W GRN
LED683	87-A40-619-040		LED,SLR-56PT-T31-W GRN
LED684	87-A40-619-040		LED,SLR-56PT-T31-W GRN
LED685	87-A40-619-040		LED,SLR-56PT-T31-W GRN
LED686	87-A40-678-010		LED,SELU1E10CXM BLUE-DEF
LED692	87-A40-678-010		LED,SELU1E10CXM BLUE-DEF
S651	87-A91-624-010		SW,RTRY EC12E1240405-20MM
S805	87-A90-095-080		SW,TACT EVQ11G04M
S806	87-A90-095-080		SW,TACT EVQ11G04M
S807	87-A90-095-080		SW,TACT EVQ11G04M
S808	87-A90-095-080		SW,TACT EVQ11G04M
S809	87-A90-095-080		SW,TACT EVQ11G04M
S810	87-A90-095-080		SW,TACT EVQ11G04M
S811	87-A90-095-080		SW,TACT EVQ11G04M
S812	87-A90-095-080		SW,TACT EVQ11G04M
S813	87-A90-095-080		SW,TACT EVQ11G04M
S815	87-A90-095-080		SW,TACT EVQ11G04M
S816	87-A90-095-080		SW,TACT EVQ11G04M
S821	87-A90-095-080		SW,TACT EVQ11G04M
S822	87-A90-095-080		SW,TACT EVQ11G04M
S823	87-A90-095-080		SW,TACT EVQ11G04M
S824	87-A90-095-080		SW,TACT EVQ11G04M
S825	87-A90-095-080		SW,TACT EVQ11G04M
S826	87-A90-095-080		SW,TACT EVQ11G04M
S827	87-A90-095-080		SW,TACT EVQ11G04M
S828	87-A90-095-080		SW,TACT EVQ11G04M
S829	87-A90-095-080		SW,TACT EVQ11G04M
S830	87-A90-095-080		SW,TACT EVQ11G04M
S831	87-A90-095-080		SW,TACT EVQ11G04M
S836	87-A90-095-080		SW,TACT EVQ11G04M
S837	87-A90-095-080		SW,TACT EVQ11G04M
S838	87-A90-095-080		SW,TACT EVQ11G04M
S842	87-A90-095-080		SW,TACT EVQ11G04M
S843	87-A90-095-080		SW,TACT EVQ11G04M
S844	87-A90-095-080		SW,TACT EVQ11G04M
S845	87-A90-095-080		SW,TACT EVQ11G04M
S846	87-A90-095-080		SW,TACT EVQ11G04M
S847	87-A90-095-080		SW,TACT EVQ11G04M
S848	87-A90-095-080		SW,TACT EVQ11G04M
S849	87-A90-095-080		SW,TACT EVQ11G04M
S850	87-A90-095-080		SW,TACT EVQ11G04M
S851	87-A90-095-080		SW,TACT EVQ11G04M

AMP IF C.B

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C1	87-A10-264-080		C-CAP,S 0.1-16 ZF
C2	87-A10-264-080		C-CAP,S 0.1-16 ZF
C3	87-010-186-080		CAP,CHIP 4700P-50
C101	87-010-178-080		CHIP CAP 1000P-50
C102	87-010-178-080		CHIP CAP 1000P
C103	87-010-405-080		CAP, ELECT 10-50V
C104	87-010-405-080		CAP, ELECT 10-50V
C107	87-010-405-080		CAP, ELECT 10-50V
C108	87-010-405-080		CAP, ELECT 10-50V
C111	87-012-140-080		C-CAP,S 470P-50 J CH
C112	87-012-140-080		C-CAP,S 470P-50 J CH
C113	87-010-260-080		CAP, ELECT 47-25V
C114	87-010-260-080		CAP, ELECT 47-25V
C115	87-A10-119-080		CAP, ELECT 10-100 REA
C116	87-A10-119-080		CAP, ELECT 10-100 REA
C119	87-010-197-080		CAP, CHIP 0.01-25
C120	87-010-197-080		CAP, CHIP 0.01-25
C133	87-010-186-080		CAP,CHIP 4700P-50
C203	88-707-949-810		CAP,M 0.47-50 J TF
C204	88-707-949-810		CAP,M 0.47-50 J TF
C205	87-010-186-080		C-CAP,S 4700P-50 KB
C206	87-010-186-080		C-CAP,S 4700P-50 KB
C207	87-010-403-080		CAP, ELECT 3.3-50V
C208	87-010-403-080		CAP, ELECT 3.3-50V
C209	87-010-184-080		CHIP CAPACITOR 3300P-50
C210	87-010-184-080		CHIP CAPACITOR 3300P-50
C211	87-010-403-080		CAP, ELECT 3.3-50V
C212	87-010-403-080		CAP, ELECT 3.3-50V
C215	87-012-156-080		C-CAP,S 220P-50

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C216	87-012-156-080		C-CAP,S 220P-50
C217	87-010-260-080		CAP, ELECT 47-25V
C218	87-010-260-080		CAP, ELECT 47-25V
C219	87-010-198-080		C-CAP,S 0.022-25 KB
C220	87-010-198-080		C-CAP,S 0.022-25 KB
C221	87-010-405-080		CAP, ELECT 10-50V
C222	87-010-405-080		CAP, ELECT 10-50V
C223	87-010-197-080		CAP, CHIP 0.01-25
C224	87-010-197-080		CAP, CHIP 0.01-25
C251	87-010-993-080		C-CAP,S 0.056-25 B
C252	87-010-196-080		CHIP CAPACITOR,0.1-25
C253	87-010-196-080		CHIP CAPACITOR,0.1-25
C254	87-010-993-080		C-CAP,S 0.056-25 B
C255	87-010-190-080		S CHIP F 0.01-50
C256	87-010-190-080		S CHIP F 0.01-50
C291	87-010-374-080		CAP, ELECT 47-10V
CNA101	8A-NF8-656-010		CONN ASSY,5P TID-A 400
CON101	87-A61-011-010		CONN,13P H BLK TAC-L13P-A3
CON102	87-A61-011-010		CONN,13P H BLK TAC-L13P-A3
J201	87-A61-148-010		JACK,PIN 4P R/W BLUE
JW14	87-018-131-080		CAP TC U 1000P-50 KB
JW51	87-A90-896-080		F-BEAD,035600STY7
JW65	87-003-223-080		F-BEAD,BL02RN2
JW101	87-018-214-080		CAP, TC U 0.1-50 ZF
L251	87-A50-610-010		COIL,1UH-S
L252	87-A50-610-010		COIL,1UH-S
R131	87-A00-262-080		RES,M/F 0.15-2W J
R132	87-A00-262-080		RES,M/F 0.15-2W J
R231	87-A00-258-080		RES,M/F 0.22-1W J
R232	87-A00-258-080		RES,M/F 0.22-1W J
WH101	87-A90-459-010		HLDR 2.5-5P

KEY CD C.B

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
CN701	87-A60-156-010		CONN,8P H FE
FC701	88-908-231-110		FF-CABLE,8P 1.25
LED771	87-A40-317-080		LED,SLR-342VCT31 RED
LED772	87-A40-317-080		LED,SLR-342VCT31 RED
LED773	87-A40-317-080		LED,SLR-342VCT31 RED
LED774	87-A40-317-080		LED,SLR-342VCT31 RED
LED775	87-A40-317-080		LED,SLR-342VCT31 RED
S751	87-A90-095-080		SW,TACT EVQ11G04M
S752	87-A90-095-080		SW,TACT EVQ11G04M
S753	87-A90-095-080		SW,TACT EVQ11G04M
S754	87-A90-095-080		SW,TACT EVQ11G04M
S755	87-A90-095-080		SW,TACT EVQ11G04M
S756	87-A90-095-080		SW,TACT EVQ11G04M
S757	87-A90-095-080		SW,TACT EVQ11G04M

DK1 LED C.B

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
LED724	87-A40-619-040		LED,SLR-56PT-T31-W GRN
LED725	87-A40-589-040		LED,SLR-56VCT31 RED
LED726	87-A40-619-040		LED,SLR-56PT-T31-W GRN

DK2 LED C.B

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
CN721	87-A60-619-010		CONNECTOR 2P V 2MM
CNA722	8A-MA3-653-010		CONN ASSY,2P V 100MM
LED721	87-A40-619-040		LED,SLR-56PT-T31-W GRN
LED722	87-A40-589-040		LED,SLR-56VCT31 RED
LED723	87-A40-619-040		LED,SLR-56PT-T31-W GRN

MIC C.B

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C601	87-010-196-080		CHIP CAPACITOR,0.1-25
CN601	87-A60-619-010		CONNECTOR 2P V 2MM
FB603	83-XM1-617-080		C-COIL,BK 2125HM 601
J601	87-099-659-010		JACK,6.3 JY-6314-01130
J602	87-099-659-010		JACK,6.3 JY-6314-01130

VM C.B

PT C.B

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C1	87-A11-148-080		CAP,TC U 0.1-50 Z F
C2	87-A11-148-080		CAP,TC U 0.1-50 Z F
C3	87-A11-148-080		CAP,TC U 0.1-50 Z F
C4	87-A11-148-080		CAP,TC U 0.1-50 Z F
C5	87-A11-148-080		CAP,TC U 0.1-50 Z F
C6	87-A11-148-080		CAP,TC U 0.1-50 Z F
C7	87-A11-148-080		CAP,TC U 0.1-50 Z F
C8	87-A11-148-080		CAP,TC U 0.1-50 Z F
C101	87-010-387-080		CAP,E 470-25 SME
C102	87-A11-148-080		CAP,TC U 0.1-50 Z F
C103	87-A11-148-080		CAP,TC U 0.1-50 Z F
C104	87-A11-148-080		CAP,TC U 0.1-50 Z F
C105	87-A11-148-080		CAP,TC U 0.1-50 Z F
C106	87-A11-148-080		CAP,TC U 0.1-50 Z F
C107	87-A11-148-080		CAP,TC U 0.1-50 Z F
C108	87-A11-148-080		CAP,TC U 0.1-50 Z F
C109	87-A11-148-080		CAP,TC U 0.1-50 Z F
C110	87-A11-148-080		CAP,TC U 0.1-50 Z F
C111	87-010-917-000		CAP,E 3300-50 M SMG
C112	87-010-917-000		CAP,E 3300-50 M SMG
C113	87-016-520-000		CAP,E 3300-65 M SMG
C114	87-016-520-000		CAP,E 3300-65 M SMG
C116	87-010-403-040		CAP,E 3.3-50 SME
CN1	87-A61-110-010		CONN,9P V TID-A
CN2	87-A61-108-010		CONN,5P V TID-A
⚠ F101	87-035-458-010		FUSE,4A 250V T W/C
⚠ FC101	87-033-213-080		CLAMP, FUSE
⚠ FC104	87-033-213-080		CLAMP, FUSE
⚠ PR103	87-026-682-080		PROTECTOR,10A 491SERIES 60V
⚠ PR106	87-026-682-080		PROTECTOR,10A 491SERIES 60V
⚠ PT1	8A-MA3-662-010		PT,AMA-3 EZ
⚠ PT2	8A-NF8-662-010		PT,SUB ANF-8 (E)
⚠ RY102	87-A90-976-010		RELAY,AC12V SDT-S-112LMR
⚠ T101	87-A60-317-010		TERMINAL, 1P MSC
⚠ T102	87-A60-317-010		TERMINAL, 1P MSC

DECK C.B

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
CON502	87-099-756-010		CONN,15P 9604S F
SFR1	87-024-581-010		SFR,3.3K DIA 6H
SOL1	82-ZM1-626-010		SOL ASSY,27K
SOL2	82-ZM1-626-010		SOL ASSY,27K
SW1	87-A90-248-010		SW,MICRO ESE11SH2CXQ
SW2	87-A90-248-010		SW,MICRO ESE11SH2CXQ
SW3	87-A90-248-010		SW,MICRO ESE11SH2CXQ
SW4	87-036-110-010		SW,MICRO SPPB62
SW5	87-036-110-010		SW,MICRO SPPB62
SW6	87-036-110-010		SW,MICRO SPPB62
SW8	87-A90-248-010		SW,MICRO ESE11SH2CXQ
SW9	87-A90-248-010		SW,MICRO ESE11SH2CXQ
W1	82-ZM3-601-010		RBN-CORD,4P-75

HEAD-1 C.B

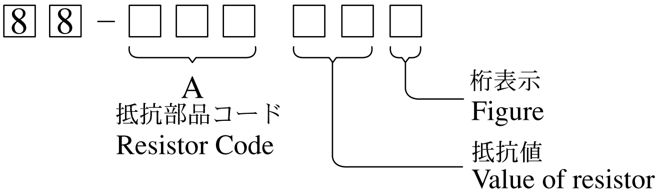
REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
	85-ZM3-601-010		PWB,FLEX I
CON301	8Z-NF3-643-010		CONN ASSY,3P-PB

HEAD-2 C.B

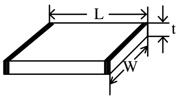
REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
	85-ZM3-601-010		PWB,FLEX I
CON351	8Z-NF3-644-010		CONN ASSY,8P-RPB

○チップ抵抗部品コード／CHIP RESISTOR PART CODE

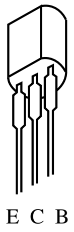
チップ抵抗部品コードの成り立ち
Chip Resistor Part Coding


8 8 – □□□ □□□
A
抵抗部品コード
Resistor Code
桁表示
Figure
抵抗値
Value of resistor

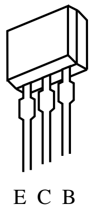
チップ抵抗
Chip resistor

容量 Wattage	種類 Type	許容誤差 Tolerance	記号 Symbol	寸法／Dimensions (mm) 外形／Form	L	W	t	抵抗コード : A Resistor Code : A
1/16W	1005	± 5%	CJ		1.0	0.5	0.35	104
1/16W	1608	± 5%	CJ		1.6	0.8	0.45	108
1/10W	2125	± 5%	CJ		2	1.25	0.45	118
1/8W	3216	± 5%	CJ		3.2	1.6	0.55	128

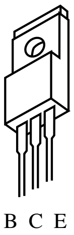
TRANSISTOR ILLUSTRATION



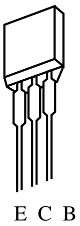
CD1585
CSA952
CSC4115
KTA1266
KTC3198
KTC3199



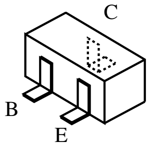
2SB1237



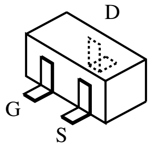
2SB1370



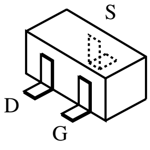
2SA933
DTC114ES



2SA1235	CMBT5551
2SC2714	KRA102
2SC3052	KRA104
2SD1306	KRA107
CSD1360	KRC102
CMBT5401	

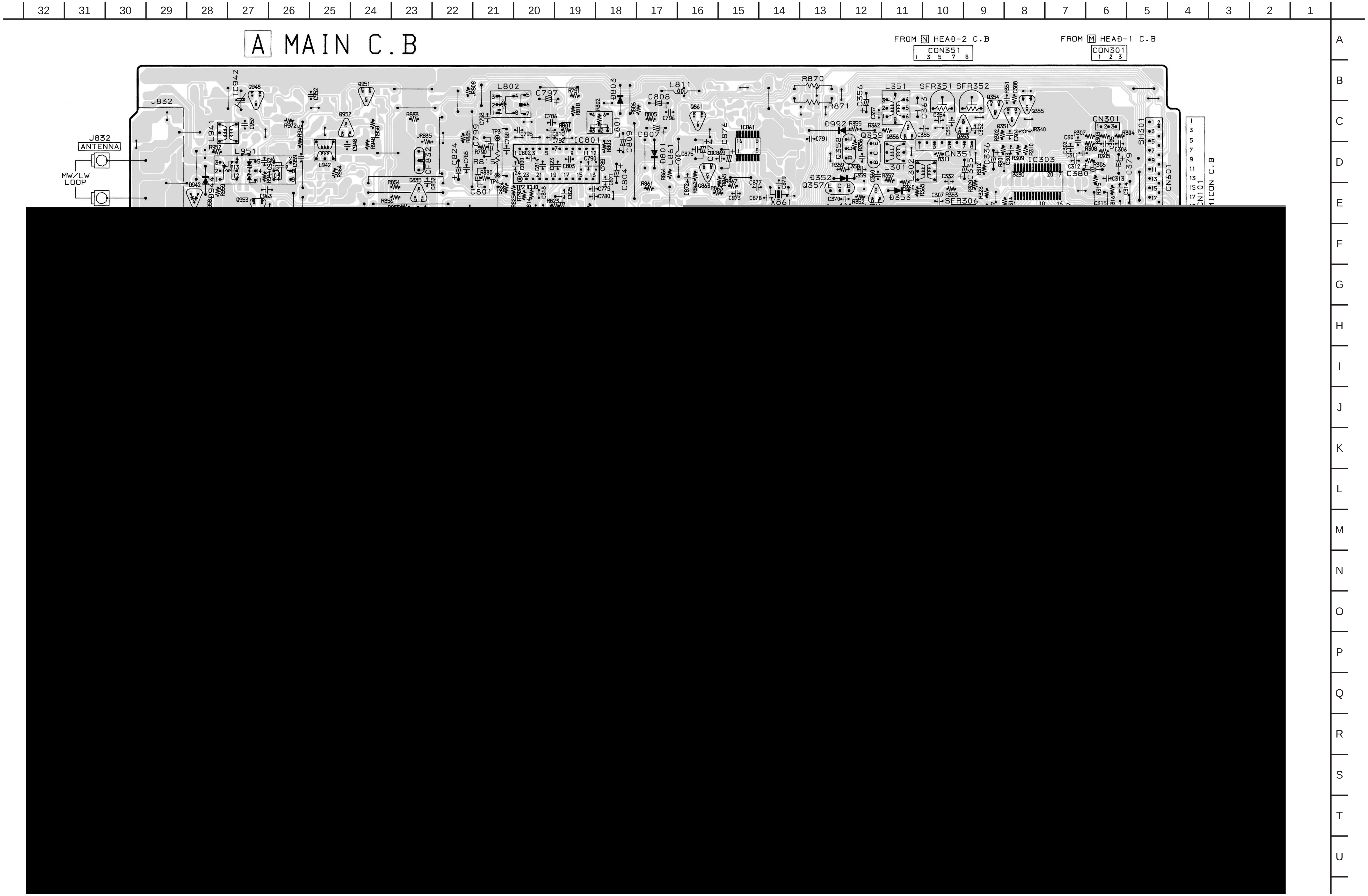


2SJ461-T1
2SK2158



2SK360

WIRING – 1 (MAIN / VM)



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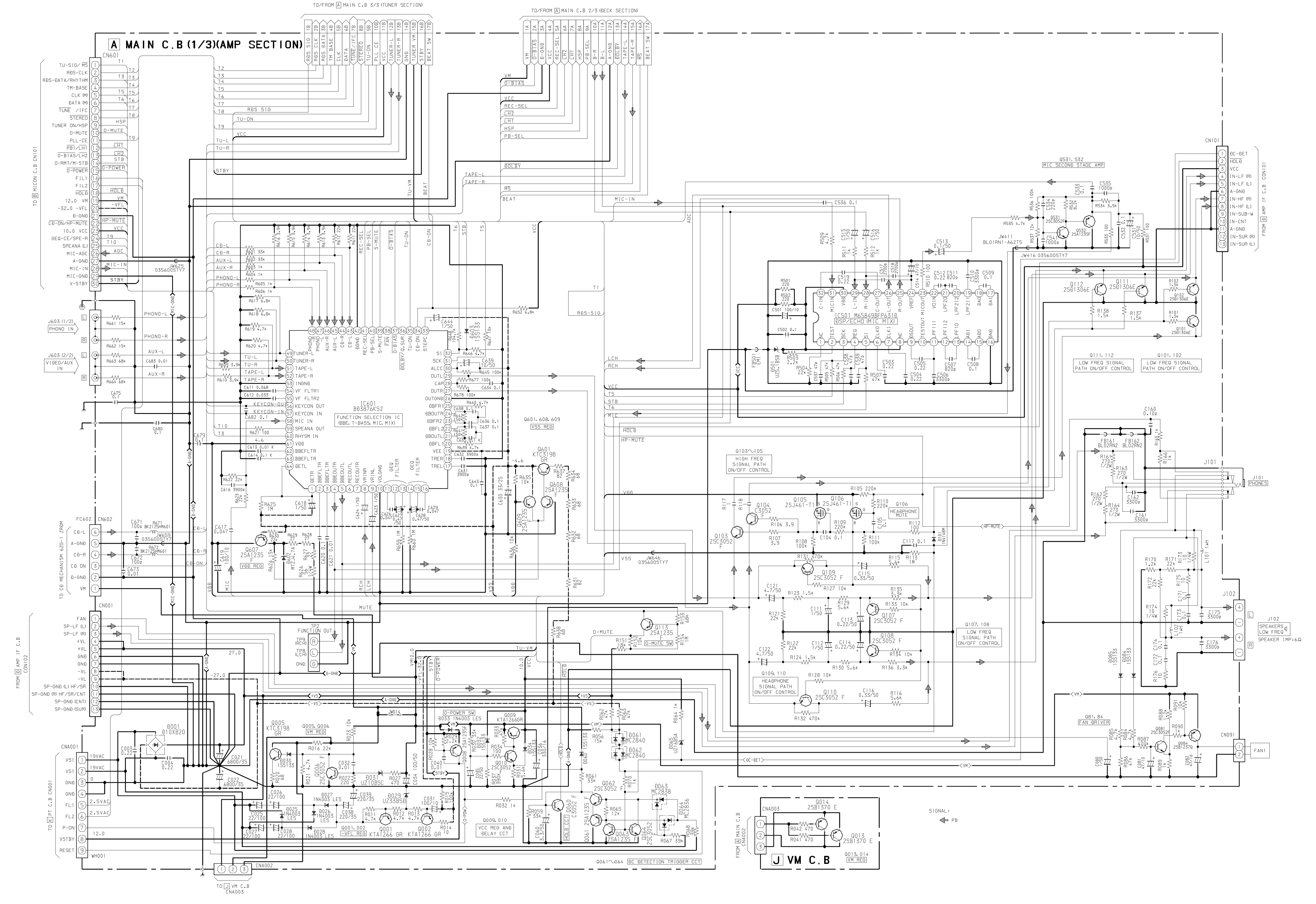
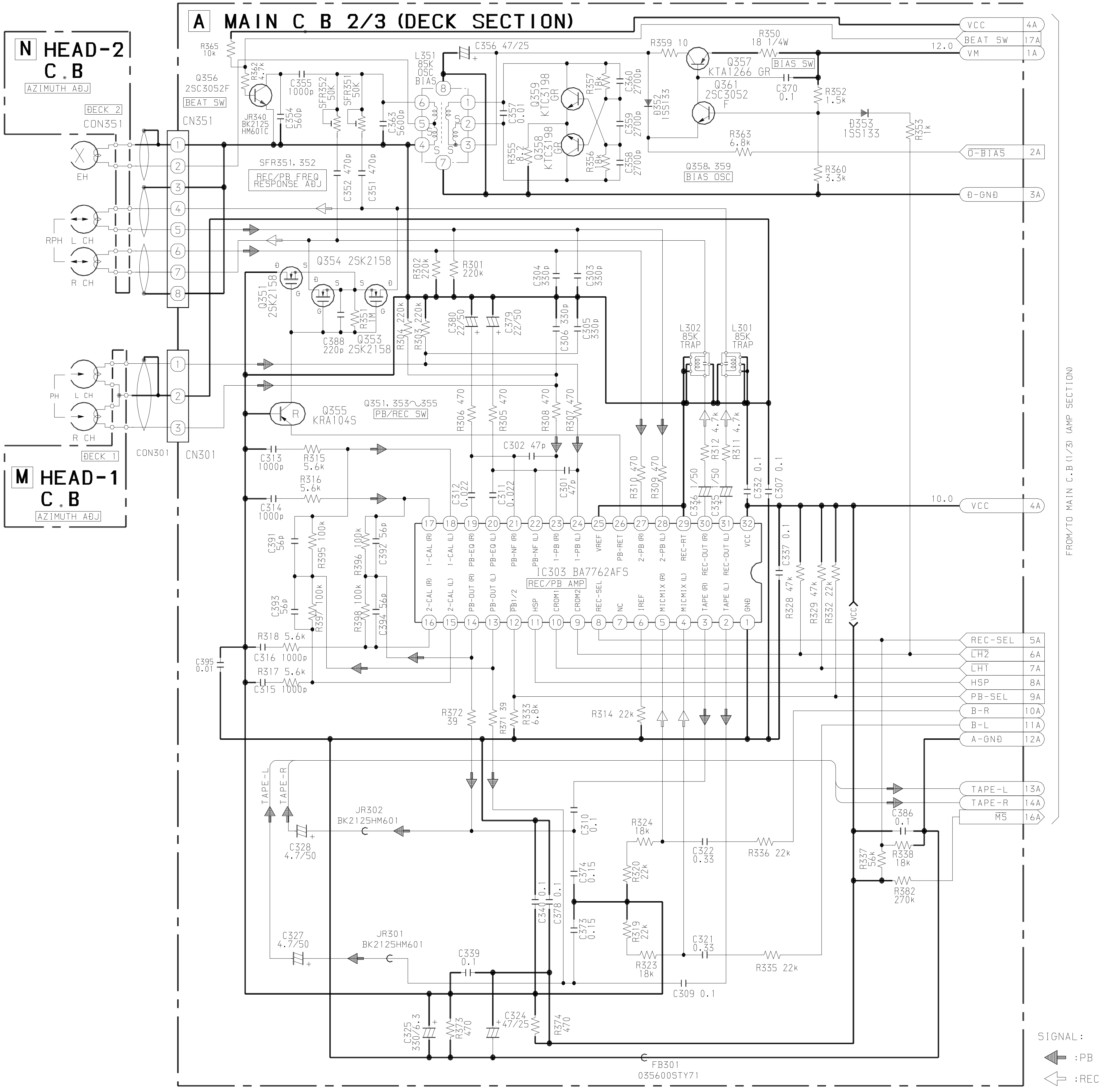
U
A MAIN C.B
FROM N HEAD-2 C.B
CON351
FROM M HEAD-1 C.B
CON301
J832
ANTENNA
MW/LW LOOP
L941
L951
IC942
L802
C797
IC801
L811
R870
R871
IC861
L351
SFR351
SFR352
CN301
SH301
CN351
IC303
L301
C380
X861
D992
D352
Q357
D353
SFR306
CN601
CN101
MICON C.B

[redacted]

SCHEMATIC DIAGRAM - 1 (MAIN 1/3 / VM)

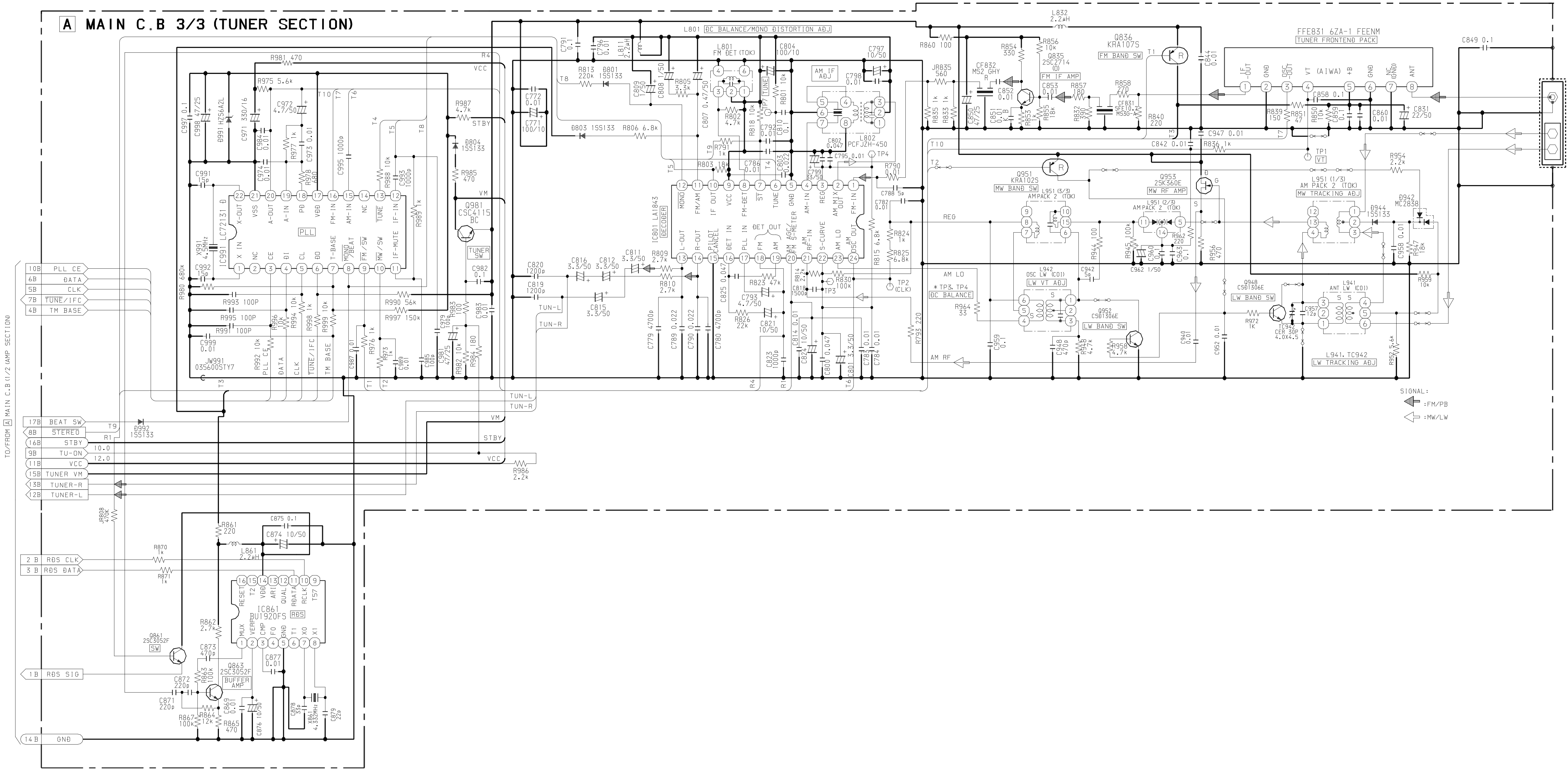

TO/FROM A MAIN C.B 3/3 (TUNER SECTION)
TO/FROM A MAIN C.B 2/3 (DECK SECTION)
A MAIN C.B (1/3)(AMP SECTION)
CN601
TO B MICON C.B CN101
CN101
FROM B AMP IF C.B CON101
Q531, 532
MIC SECOND STAGE AMP
IC501 M65849BFP6310
DSP/ECHO (MIC MIX)
IC601
BD3876KS2
FUNCTION SELECTION IC
(BBE, T-BASS, MIC, MIX)
Q601, 608, 609
VSS REG
Q111, 112
LOW FREQ SIGNAL PATH ON/OFF CONTROL
Q101, 102
LOW FREQ SIGNAL PATH ON/OFF CONTROL
Q103～105
HIGH FREQ SIGNAL PATH ON/OFF CONTROL
Q106
HEADPHONE MUTE
Q107, 108
LOW FREQ SIGNAL PATH ON/OFF CONTROL
Q109, 110
HEADPHONE SIGNAL PATH ON/OFF CONTROL
J101
PHONES
J102
SPEAKERS LOW FREQ
SPEAKER IMP:6Ω
J603 (1/2)
PHONO IN
J603 (2/2)
VIDEO/AUX IN
FC602
CN602
TO CD MECHANISM 620-1 ZROM
CN001
FROM B AMP IF C.B CON102
CNA001
TO K PT C.B CN001
WH001
CNA002
TO J VM C.B CNA003
Q005, Q006
VM REG
D-POWER SW
Q001, 002
-VFL REG
Q009, 010
VCC REG AND DELAY CCT
Q061～064
DC DETECTION TRIGGER CCT
Q081, 84
FAN DRIVER
CN091
FAN1
J VM C.B
CNA003
FROM A MAIN C.B CNA002
Q013, 014
VM REG
SIGNAL:
PB
TP2
FUNCTION OUT
Q113
D-MUTE SW
Q607
VDD REG

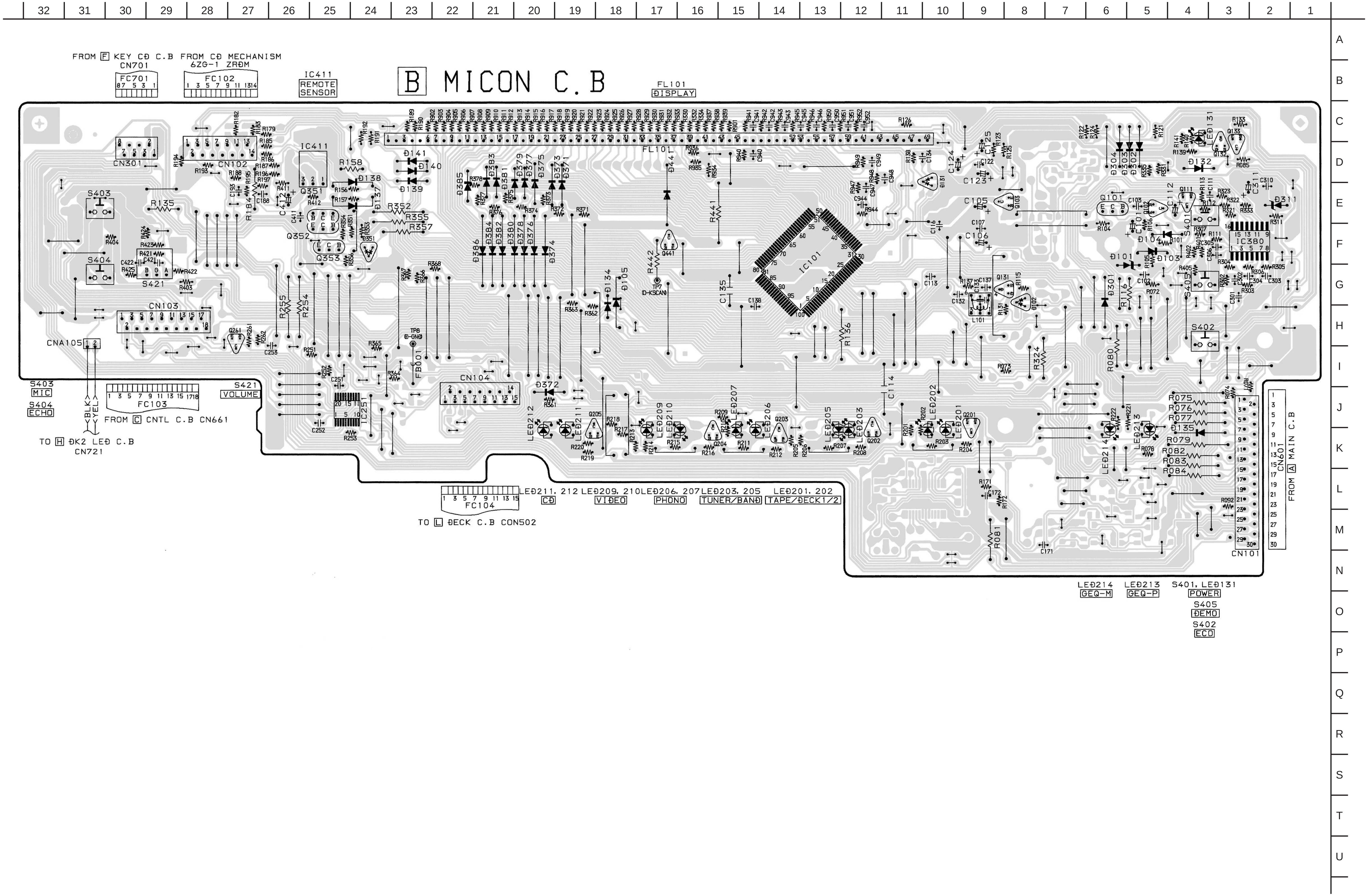
SCHEMATIC DIAGRAM - 2 (MAIN 2/3 : DECK / HEAD-1 / HEAD-2)



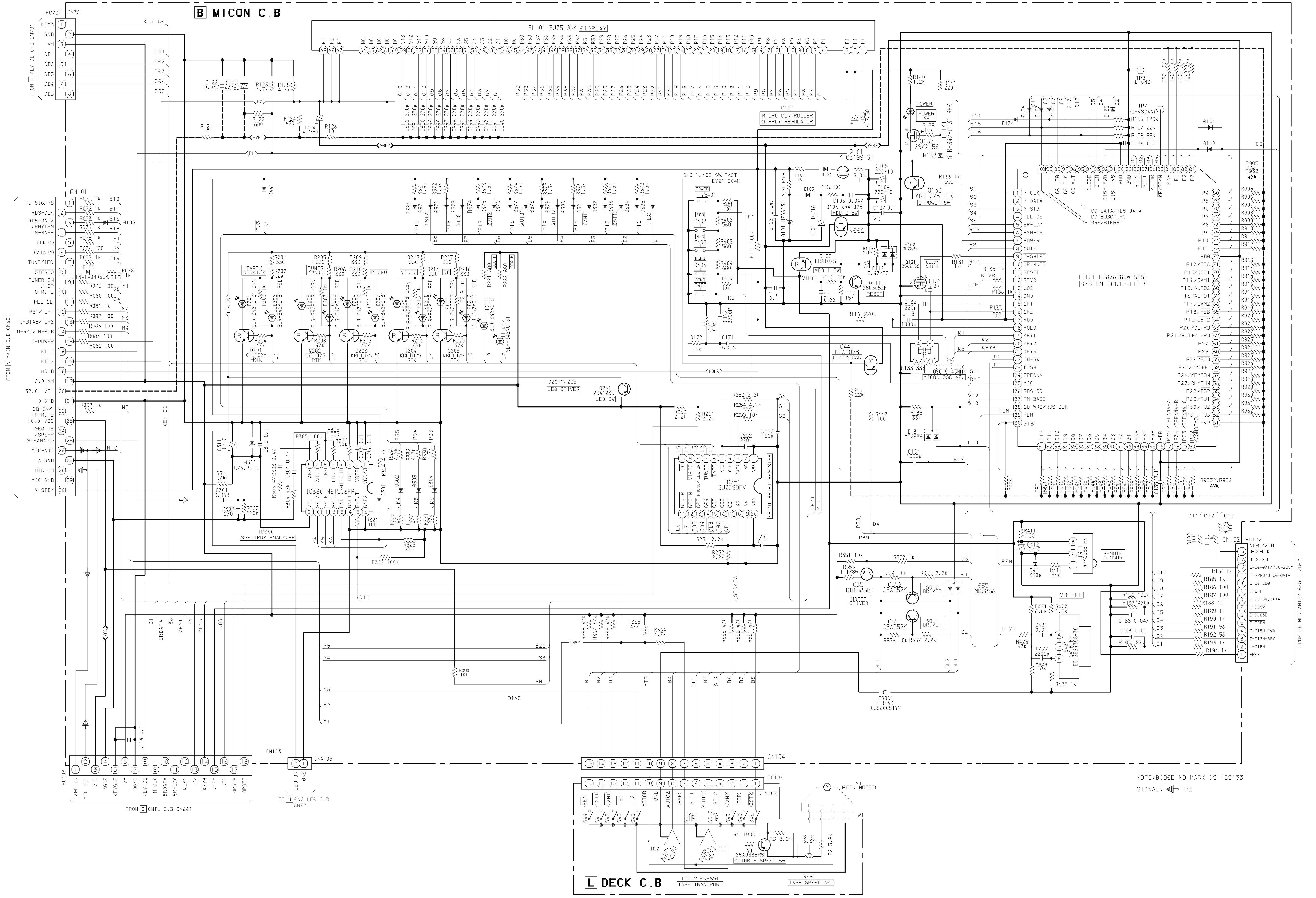
A MAIN C B 2/3 (DECK SECTION)
N HEAD-2 C.B
AZIMUTH ADJ
DECK 2
CON351
EH
RPH L CH
R CH
CN351
M HEAD-1 C.B
AZIMUTH ADJ
DECK 1
CON301
CN301
PH L CH
R CH
R365 10k
Q356 2SC3052F
BEAT SW
R362 4.7k
JR340 BK2125 HM601C
C355 1000p
C354 560p
SFR352 50K
SFR351 50K
C363 5600p
L351 85K OSC BIAS
C356 47/25
C357 0.01
Q359 KTC3198 GR
Q358 KTC3198 GR
R355 8.2
R357 18k
R356 18k
C360 2700p
C359 2700p
C358 2700p
D352 1SS133
R359 10
R350 18 1/4W
Q357 KTA1266 GR
BIAS SW
Q361 2SC3052 F
C370 0.1
R352 1.5k
D353 1SS133
R353 1k
R363 6.8k
R360 3.3k
Q358, 359 BIAS OSC
SFR351, 352 REC/PB FREQ RESPONSE ADJ
C352 470p
C351 470p
Q354 2SK2158
Q351 2SK2158
Q353 2SK2158
C388 220p
R351 1M
Q355 KRA104S
Q351, 353~355 PB/REC SW
R302 220k
R301 220k
R304 220k
R303 220k
C380 22/50
C379 22/50
C304 330p
C303 330p
C306 330p
C305 330p
L302 85K TRAP
L301 85K TRAP
R306 470
R305 470
R308 470
R307 470
C302 47p
C313 1000p
R315 5.6k
R316 5.6k
C314 1000p
C312 0.022
C311 0.022
C301 47p
R310 470
R309 470
C336 1/50
C335 1/50
R312 4.7k
R311 4.7k
C332 0.1
C307 0.1
C391 56p
R395 100k
R396 100k
C392 56p
C393 56p
R397 100k
R398 100k
C394 56p
IC303 BA7762AFS
REC/PB AMP
1-CAL (R)
1-CAL (L)
PB-EQ (R)
PB-EQ (L)
PB-NF (R)
PB-NF (L)
1-PB (R)
1-PB (L)
VREF
PB-RET
2-PB (R)
2-PB (L)
REC-RT
REC-OUT (R)
REC-OUT (L)
VCC
2-CAL (R)
2-CAL (L)
PB-OUT (R)
PB-OUT (L)
PB1/2
HSP
CROM1
CROM2
REC-SEL
NC
IREF
MICMIX (R)
MICMIX (L)
TAPE (R)
TAPE (L)
GND
C337 0.1
R328 47k
R329 47k
R332 22k
R318 5.6k
C316 1000p
C395 0.01
R317 5.6k
C315 1000p
R372 39
R371 39
R333 6.8k
R314 22k
TAPE-L
TAPE-R
JR302 BK2125HM601
C328 4.7/50
C327 4.7/50
JR301 BK2125HM601
C339 0.1
C310 0.1
C374 0.15
C373 0.15
C340 0.1
C378 0.1
R324 18k
R320 22k
R319 22k
R323 18k
C322 0.33
C321 0.33
R336 22k
R335 22k
C309 0.1
C325 330/6.3
R373 470
C324 47/25
R374 470
FB301 0356005TY71
C386 0.1
R337 56k
R338 18k
R382 270k
12.0
10.0
VCC 4A
BEAT SW 17A
VM 1A
D-BIAS 2A
D-GND 3A
VCC 4A
REC-SEL 5A
LH2 6A
LH1 7A
HSP 8A
PB-SEL 9A
B-R 10A
B-L 11A
A-GND 12A
TAPE-L 13A
TAPE-R 14A
MS 16A
FROM/TO MAIN C.B (1/3) (AMP SECTION)
SIGNAL:
:PB
:REC

SCHEMATIC DIAGRAM - 3 (MAIN 3/3 : TUNER)

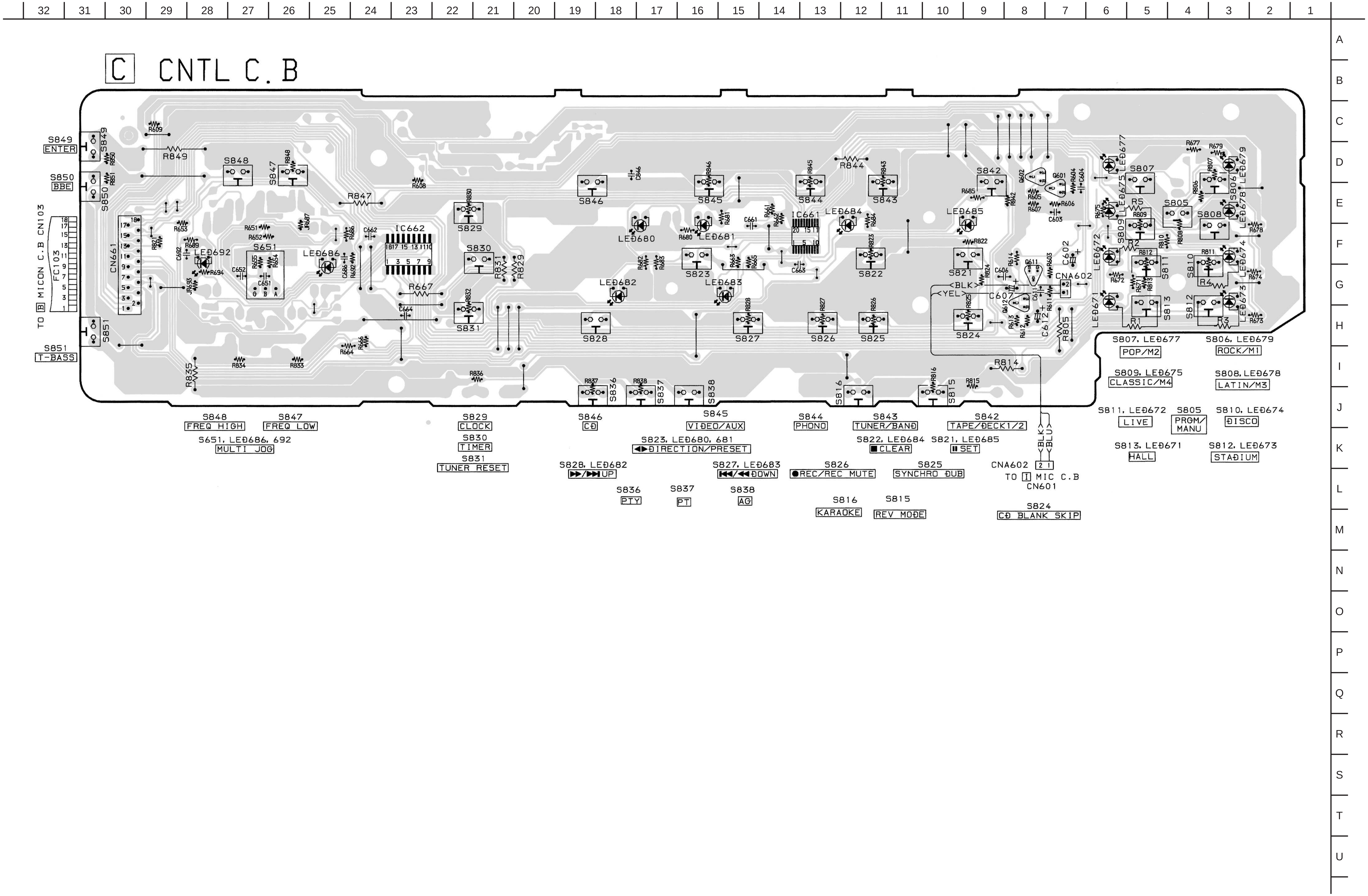

A MAIN C.B 3/3 (TUNER SECTION)
IC991 LC72131 D
PLL
IC801 LA1843
DECODER
IC861 BU1920FS
RDS
Q981 CSC4115 BC
TUNER SW
Q861 2SC3052F
SW
Q863 2SC3052F
BUFFER AMP
Q836 KRA107S
FM BAND SW
Q835 2SC2714 (O)
FM IF AMP
Q951 KRA102S
MW BAND SW
Q953 2SK360E
MW RF AMP
Q948 CSD1306E
LW BAND SW
Q952 CSD1306E
LW BAND SW
FFE831 6ZA-1 FEENM
TUNER FRONTEND PACK
J832
ANTENNA
FM 75Ω (COAXIAL)
MW/LW LOOP
L801 DC BALANCE/MONO DISTORTION ADJ
L801 FM DET (TOK)
L802 PCFJZH-450
AM IF ADJ
CF832 MS2 GHY
CF831 SFE10.7 MS3G
L832 2.2µH
L951 (1/3) AM PACK 2 (TDK)
MW TRACKING ADJ
L951 (2/3) AM PACK 2 (TDK)
L951 (3/3) AMPACK 2 (TDK)
L942 OSC LW (COI)
LW VT ADJ
L941 ANT LW (COI)
L941, TC942 LW TRACKING ADJ
D942 MC2838
D944 1SS133
D991 HZS6A2L
X991 4.5MHz
X861 4.332MHz
JW991 03S600STY7
TP1 VT
TP2 (CLK)
TP3
TP4
* TP3, TP4 DC BALANCE
AM LO
AM RF
REG
SIGNAL:
:FM/PB
:MW/LW
TO/FROM A MAIN C.B (1/2 AMP SECTION)
10B PLL CE
6B DATA
5B CLK
7B TUNE/IFC
4B TM BASE
17B BEAT SW
8B STEREO
16B STBY
9B TU-ON
11B VCC
15B TUNER VM
13B TUNER-R
12B TUNER-L
2 B RDS CLK
3 B RDS DATA
1 B RDS SIG
14 B GND
TUN-L
TUN-R
VM
STBY
VCC


32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1
A B C D E F G H I J K L M N O P Q R S T U
B MICON C.B
FROM F KEY CD C.B CN701
FROM CD MECHANISM 6ZG-1 ZROM
FC701
FC102
IC411 REMOTE SENSOR
FL101 DISPLAY
CN301
CN102
CN103
CN104
IC411
IC101
IC380
IC251
Q351
Q352
Q353
Q441
Q101
Q131
S403
S404
S421
S405
S402
S401
CNA105
FB001
S403 MIC
S404 ECHO
S421 VOLUME
BLK
YEL
FC103
FROM C CNTL C.B CN661
TO H DK2 LED C.B CN721
FC104
TO L DECK C.B CON502
LED211, 212 CD
LED209, 210 VIDEO
LED206, 207 PHONO
LED203, 205 TUNER/BAND
LED201, 202 TAPE/DECK1/2
LED214 GEQ-M
LED213 GEQ-P
S401, LED131 POWER
S405 DEMO
S402 ECO
CN101
CN601 FROM A MAIN C.B
TP7 (D-KSCAN)
TP8 (D-GND)

SCHEMATIC DIAGRAM - 4 (MICON / DECK)


B MICON C.B
FL101 BJ751GNK DISPLAY
FC701 CN301
FROM F KEY C0 C.B CN701
CN101
FROM A MAIN C.B CN601
Q101 MICRO CONTROLLER SUPPLY REGULATOR
S401~405 SW TACT EVQ11004M
IC101 LC876580W-5P55 SYSTEM CONTROLLER
Q133 KRC1025-RTK D-POWER SW
Q201~205 LED DRIVER
Q261 2SA1235F LED SW
IC380 M61506FP SPECTRUM ANALYZER
IC251 BU2099FV FRONT SHIFT REGISTER
Q441 KRA1025 D-KEYSCAN
L101 COIL CLOCK OSC 9.43MHz MICON OSC ADJ
REMOTE SENSOR
VOLUME
Q351 2SD1585BC MOTOR DRIVER
Q352 CSA952K SOL2 DRIVER
Q353 CSA952K SOL1 DRIVER
D351 MC2836
CN102 FC102
FROM CD MECHANISM 626-1 2R0M
FB001 F-BEAD 0356005TY7
CN103 CNA105
TO H 0K2 LED C.B CN721
CN104
FC103
FROM C CNTL C.B CN661
FC104 CON502
M1 (DECK MOTOR)
Q1 2SA933SRS MOTOR H-SPEED SW
SFR1 TAPE SPEED ADJ
IC1,2 0N6851 TAPE TRANSPORT
L DECK C.B
NOTE:DIODE NO MARK IS 1SS133
SIGNAL: PB

WIRING – 3 (CNTL)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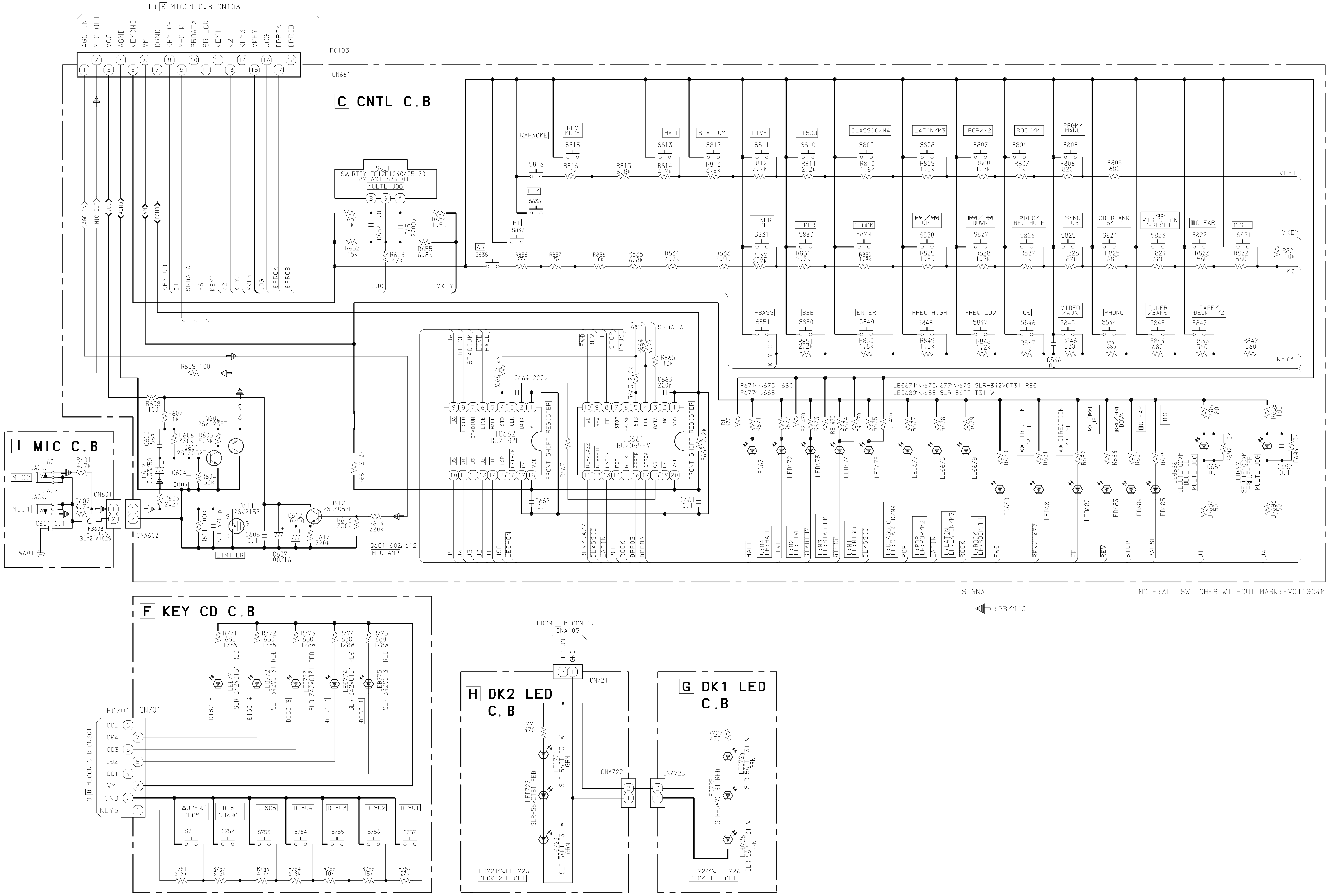
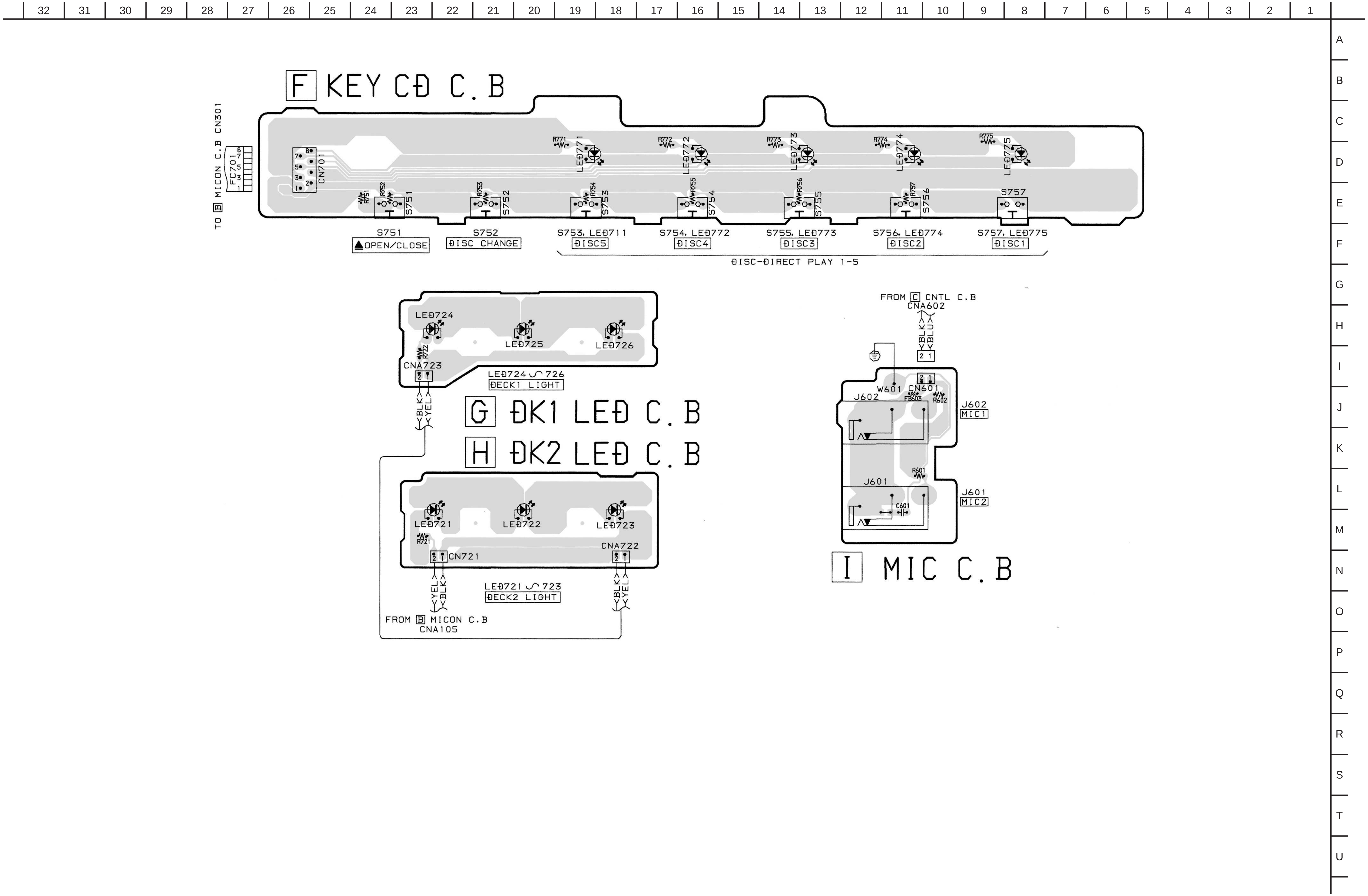
S849 ENTER
S850 BBE
S851 T-BASS
TO B MICON C.B CN103
FC103
CN661
IC662
IC661
S651
LED692
LED686
LED680
LED681
LED682
LED683
LED684
LED685
S848 FREQ HIGH
S847 FREQ LOW
S651, LED686, 692 MULTI JOG
S829 CLOCK
S830 TIMER
S831 TUNER RESET
S846 CD
S845 VIDEO/AUX
S823, LED680, 681 ◀▶DIRECTION/PRESET
S828, LED682 ▶▶/▶▶|UP
S827, LED683 |◀◀/◀◀DOWN
S836 PTY
S837 PT
S838 AG
S844 PHONO
S843 TUNER/BAND
S822, LED684 ■CLEAR
S826 ●REC/REC MUTE
S816 KARAOKE
S815 REV MODE
S842 TAPE/DECK1/2
S821, LED685 II SET
S825 SYNCHRO DUB
CNA602 2 1
TO I MIC C.B CN601
<BLK>
<BLU>
<YEL>
S824 CD BLANK SKIP
S807, LED677 POP/M2
S806, LED679 ROCK/M1
S809, LED675 CLASSIC/M4
S808, LED678 LATIN/M3
S811, LED672 LIVE
S805 PRGM/MANU
S810, LED674 DISCO
S813, LED671 HALL
S812, LED673 STADIUM

SCHEMATIC DIAGRAM - 5 (CNT L / KEY CD / DK1 LED / DK2 LED / MIC)

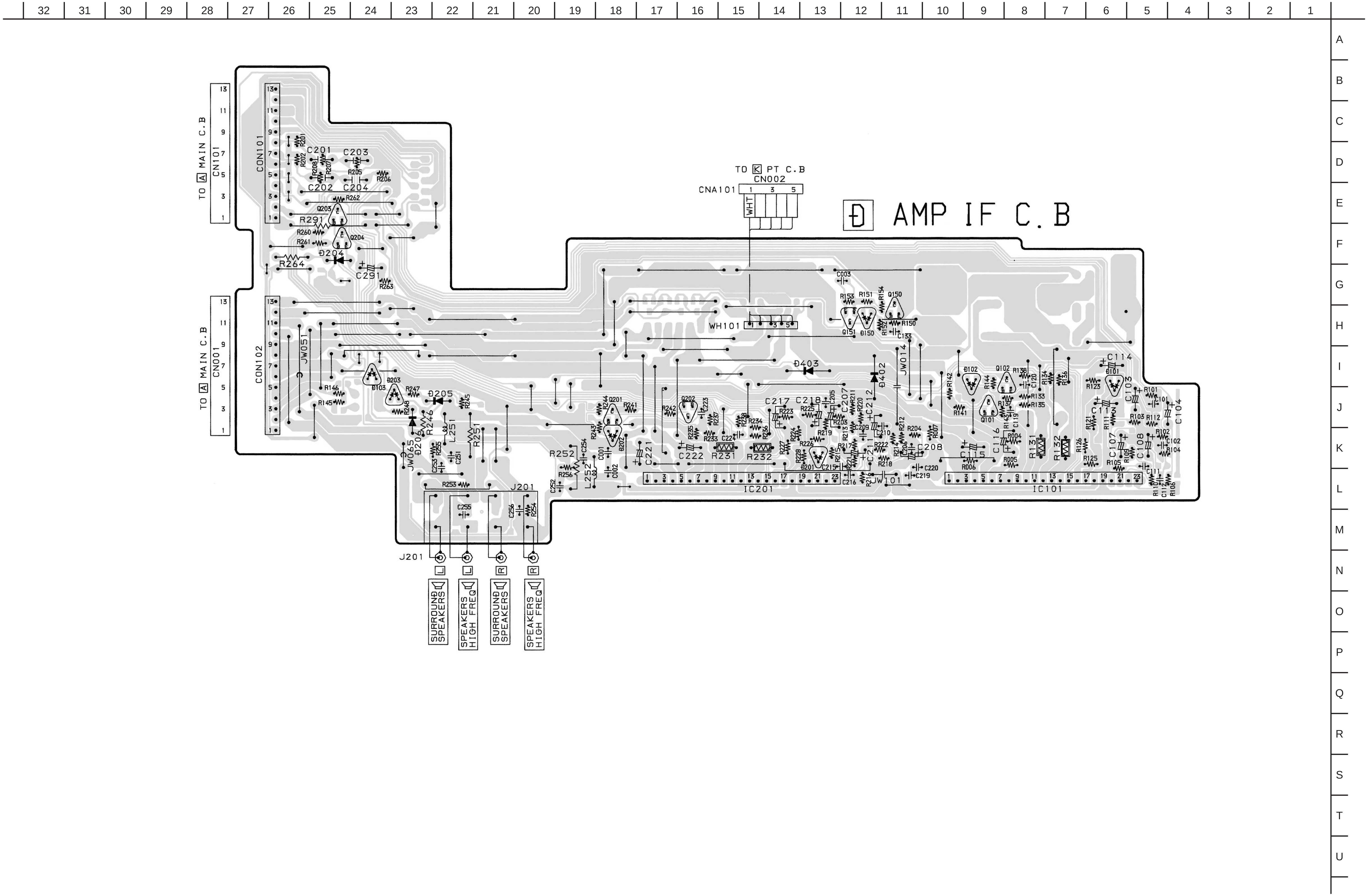

TO B MICON C.B CN103
AGC IN
MIC OUT
VCC
AGND
KEYGND
VM
DGND
KEY CD
M-CLK
SRDATA
SR-LCK
KEY1
K2
KEY3
VKEY
JOG
DPROA
DPROB
FC103
CN661
C CNTL C.B
KARAOKE
REV MODE
HALL
STADIUM
LIVE
DISCO
CLASSIC/M4
LATIN/M3
POP/M2
ROCK/M1
PRGM/ MANU
S651
SW, RTRY EC12E1240405-20
87-A91-624-01
MULTL JOG
PTY
RT
AG
TUNER RESET
TIMER
CLOCK
UP
DOWN
REC/ REC MUTE
SYNC DUB
CD BLANK SKIP
DIRECTION /PRESET
CLEAR
SET
T-BASS
BBE
ENTER
FREQ HIGH
FREQ LOW
CD
VIDEO /AUX
PHONO
TUNER /BAND
TAPE/ DECK 1/2
IC662 BU2092F
IC661 BU2099FV
FRONT SHIFT REGISTER
LED671∼675, 677∼679 SLR-342VCT31 RED
LED680∼685 SLR-56PT-T31-W
I MIC C.B
J601 JACK
J602 JACK
MIC2
MIC1
CN601
CNA602
W601
Q601 2SC3052F
Q602 2SA1235F
Q611 2SK2158
Q612 2SC3052F
LIMITER
Q601, 602, 612, MIC AMP
SIGNAL:
:PB/MIC
NOTE:ALL SWITCHES WITHOUT MARK:EVQ11G04M
F KEY CD C.B
FC701
CN701
TO B MICON C.B CN301
CD5
CD4
CD3
CD2
CD1
VM
GND
KEY3
OPEN/ CLOSE
DISC CHANGE
DISC5
DISC4
DISC3
DISC2
DISC1
FROM B MICON C.B CNA105
LED ON
GND
CN721
H DK2 LED C.B
LED721∼LED723 DECK 2 LIGHT
CNA722
CNA723
G DK1 LED C.B
LED724∼LED726 DECK 1 LIGHT

WIRING – 4 (KEY CD / DK1 LED / DK2 LED / MIC)

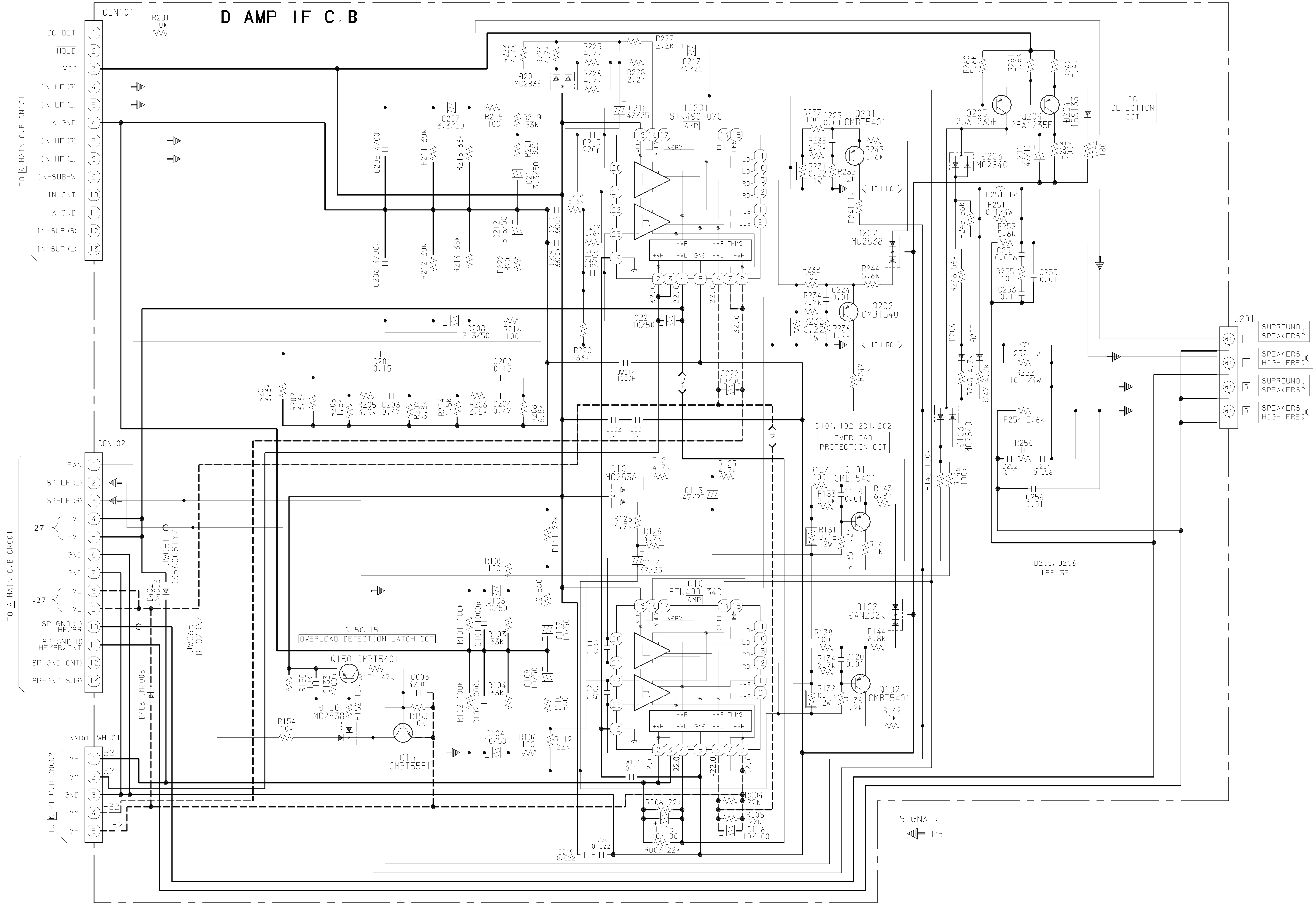


32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1
A B C D E F G H I J K L M N O P Q R S T U
F KEY CD C.B
TO B MICON C.B CN301
FC701
CN701
R751
R752
R753
R754
R755
R756
R757
R771
R772
R773
R774
R775
LED771
LED772
LED773
LED774
LED775
S751
S752
S753
S754
S755
S756
S757
S751 ▲OPEN/CLOSE
S752 DISC CHANGE
S753, LED711 DISC5
S754, LED772 DISC4
S755, LED773 DISC3
S756, LED774 DISC2
S757, LED775 DISC1
DISC-DIRECT PLAY 1-5
LED724
LED725
LED726
R722
CNA723
LED724 ∽ 726 DECK1 LIGHT
BLK
YEL
G DK1 LED C.B
H DK2 LED C.B
LED721
LED722
LED723
R721
CN721
CNA722
LED721 ∽ 723 DECK2 LIGHT
YEL
BLK
FROM B MICON C.B CNA105
FROM C CNTL C.B CNA602
BLK
BLU
W601
CN601
J602
FB603
R602
J602 MIC1
R601
J601
C601
J601 MIC2
I MIC C.B

WIRING – 5 (AMP IF)

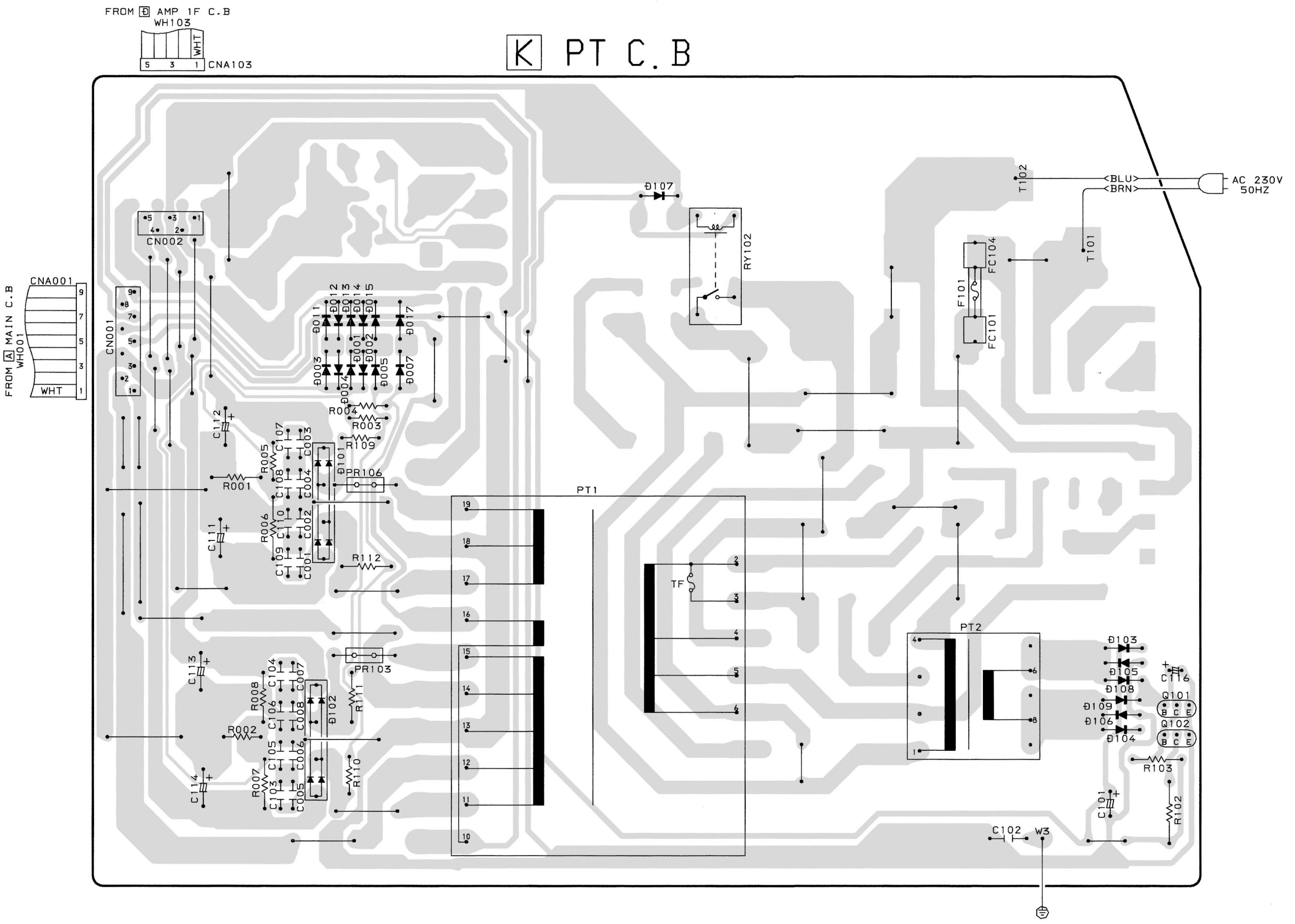

32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1
A B C D E F G H I J K L M N O P Q R S T U
Ð AMP IF C.B
TO A MAIN C.B
CN101
CON101
TO A MAIN C.B
CN001
CON102
TO K PT C.B
CN002
CNA101
WHT
WH101
JW051
JW065
JW014
JW101
IC201
IC101
J201
C201
C203
C202
C204
R291
R264
C291
Ð204
Ð205
Ð203
Ð103
Ð403
Ð402
Ð201
Ð202
Ð101
Ð102
Ð150
Q201
Q202
Q203
Q204
Q101
Q102
Q150
Q151
L251
L252
R251
R252
R231
R232
R131
R132
C217
C218
C207
C212
C211
C208
C221
C222
C114
C103
C104
C107
C108
C116
C115
C111
C112
C001
C002
C003
L
L
R
R
SURROUND SPEAKERS
SPEAKERS HIGH FREQ
SURROUND SPEAKERS
SPEAKERS HIGH FREQ

SCHEMATIC DIAGRAM - 6 (AMP)



D AMP IF C.B
CON101
R291 10k
ĐC-ĐET
HOLĐ
VCC
IN-LF (R)
IN-LF (L)
A-GNĐ
IN-HF (R)
IN-HF (L)
IN-SUB-W
IN-CNT
A-GNĐ
IN-SUR (R)
IN-SUR (L)
TO A MAIN C.B CN101
R223 4.7k
R224 4.7k
R225 4.7k
R226 4.7k
R227 2.2k
R228 2.2k
C217 47/25
Đ201 MC2836
C218 47/25
IC201 STK490-070
AMP
C205 4700p
C207 3.3/50
R215 100
R219 33k
R211 39k
R213 33k
R221 820
C211 3.3/50
C215 220p
R218 5.6k
C212 3.3/50
C210 3300p
R217 5.6k
R222 820
C209 3300p
C216 220p
C206 4700p
R212 39k
R214 33k
C208 3.3/50
R216 100
C221 10/50
R220 33k
C201 0.15
C202 0.15
R201 3.3k
R202 3.3k
R203 1.5k
R205 3.9k
C203 0.47
R207 6.8k
R204 1.5k
R206 3.9k
C204 0.47
R208 6.8k
JW014 1000P
C222 10/50
C002 0.1
C001 0.1
+VL
-VL
32.0
22.0
-22.0
-32.0
R237 100
C223 0.01
Q201 CMBT5401
R233 2.7k
R231 0.22 1W
R235 1.2k
R243 5.6k
R241 1k
HIGH-LCH
Đ202 MC2838
R238 100
R234 2.7k
C224 0.01
R244 5.6k
Q202 CMBT5401
R232 0.22 1W
R236 1.2k
HIGH-RCH
R242 1k
R260 5.6k
R261 5.6k
R262 5.6k
Q203 2SA1235F
Q204 2SA1235F
Đ204 1SS133
ĐC ĐETECTION CCT
Đ203 MC2840
C291 47/10
R263 100k
R264 180
L251 1μ
R251 10 1/4W
R245 56k
R253 5.6k
C251 0.056
R255 10
C255 0.01
C253 0.1
R246 56k
Đ206
Đ205
L252 1μ
R252 10 1/4W
R248 4.7k
R247 4.7k
R254 5.6k
R256 10
C252 0.1
C254 0.056
C256 0.01
Đ103 MC2840
R145 100k
R146 100k
Q101, 102, 201, 202
OVERLOAĐ PROTECTION CCT
J201
SURROUNĐ SPEAKERS L
SPEAKERS HIGH FREQ L
SURROUNĐ SPEAKERS R
SPEAKERS HIGH FREQ R
CON102
FAN
SP-LF (L)
SP-LF (R)
+VL
+VL
GNĐ
GNĐ
-VL
-VL
SP-GNĐ (L) HF/SR
SP-GNĐ (R) HF/SR/CNT
SP-GNĐ (CNT)
SP-GNĐ (SUR)
TO A MAIN C.B CN001
27
-27
JW051 03560OSTY7
Đ402 1N4003
JW065 BL02RNZ
Đ403 1N4003
Đ101 MC2836
R121 4.7k
R125 4.7k
C113 47/25
R123 4.7k
R126 4.7k
C114 47/25
R111 22k
R105 100
C103 10/50
R109 560
IC101 STK490-340
AMP
R101 100k
C101 1000p
R103 33k
C107 10/50
C111 470p
C108 10/50
C112 470p
R102 100k
C102 1000p
R104 33k
R110 560
C104 10/50
R106 100
R112 22k
JW101 0.1
52.0
22.0
-22.0
-52.0
R006 22k
C115 10/100
R007 22k
R004 22k
R005 22k
C116 10/100
C219 0.022
C220 0.022
Q150, 151
OVERLOAĐ ĐETECTION LATCH CCT
Q150 CMBT5401
R150 10k
C133 4700p
R151 47k
C003 4700p
R152 10k
Đ150 MC2838
R153 10k
R154 10k
Q151 CMBT5551
R137 100
Q101 CMBT5401
R133 2.7k
C119 0.01
R143 6.8k
R131 0.15 2W
R135 1.2k
R141 1k
Đ205, Đ206 1SS133
Đ102 ĐAN202K
R138 100
R144 6.8k
R134 2.7k
C120 0.01
R132 0.15 2W
R136 1.2k
Q102 CMBT5401
R142 1k
CNA101
WH101
+VH
+VM
GNĐ
-VM
-VH
52
32
-32
-52
TO K PT C.B CN002
SIGNAL:
PB

WIRING – 6 (PT)


15
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A
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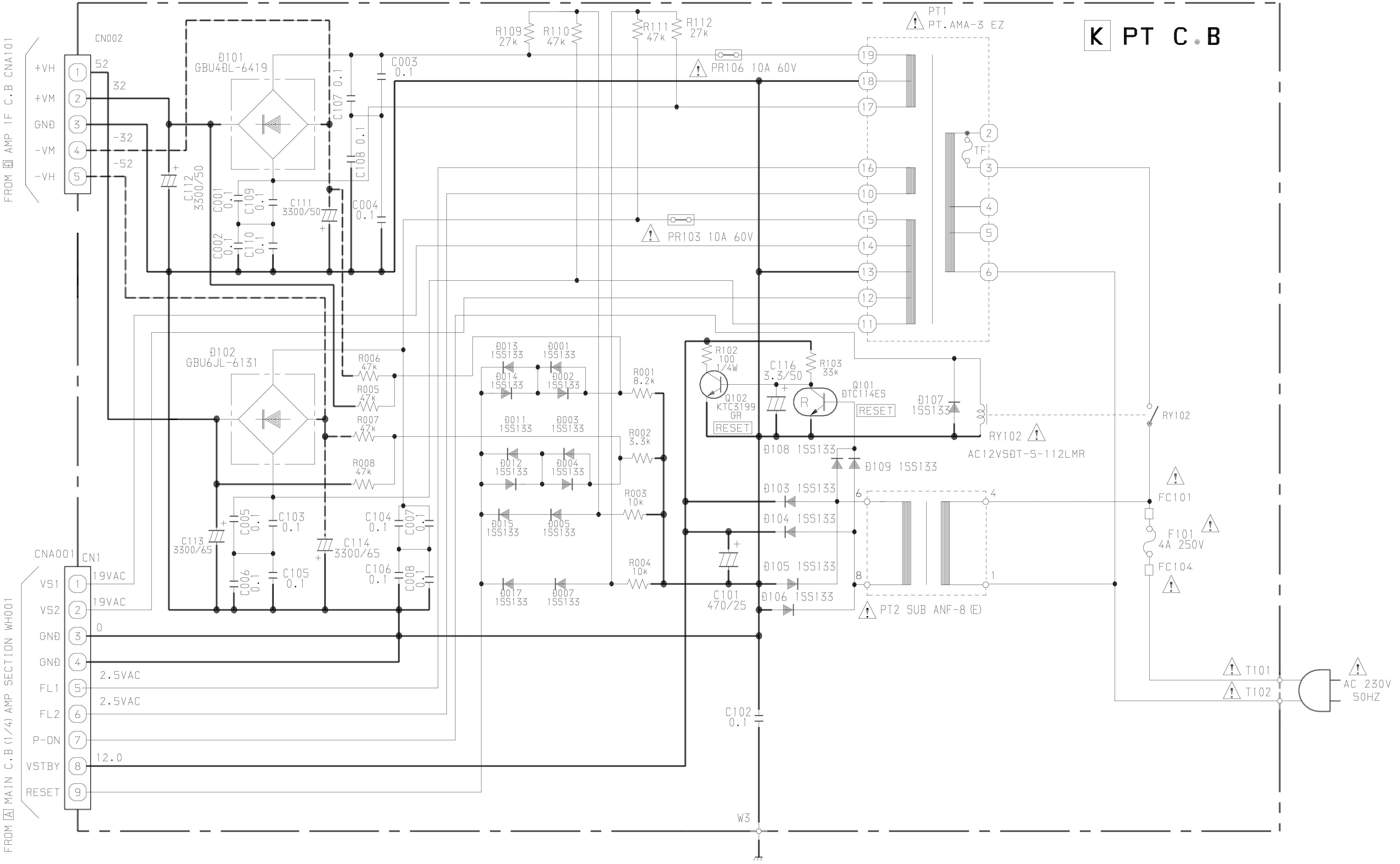
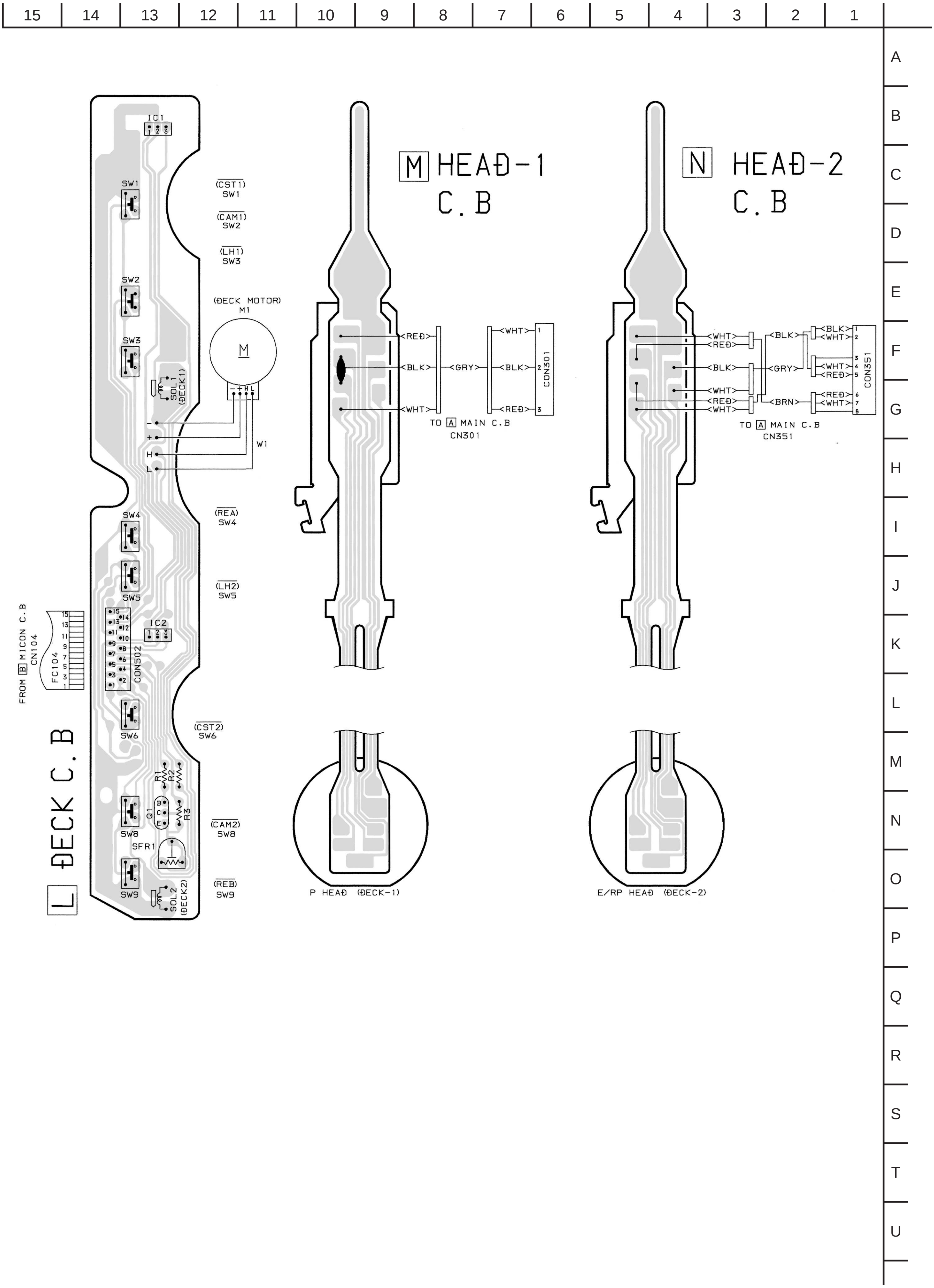
C
D
E
F
G
H
I
J
K
L
M
N
O
P
Q
R
S
T
U
FROM D AMP 1F C.B
WH103
WHT
5 3 1
CNA103
K PT C.B
FROM A MAIN C.B
WH001
CNA001
WHT
9
7
5
3
1
CN001
CN002
D107
RY102
T102
<BLU>
<BRN>
AC 230V
50HZ
T101
FC104
F101
FC101
D011
D012
D013
D014
D015
D017
D003
D004
D001
D002
D005
D007
R004
R003
R109
C112
R005
C107
C003
C108
C004
D101
PR106
R001
R006
C110
C002
C111
C109
C001
R112
PT1
TF
C113
R008
C104
C007
C106
C008
D102
R111
PR103
R002
C105
C006
C114
R007
C103
C005
R110
PT2
D103
D105
C116
D108
Q101
D109
D106
Q102
D104
B C E
R103
C101
R102
C102
W3

SCHEMATIC DIAGRAM - 7 (PT)


K PT C.B
FROM D AMP 1F C.B CNA101
CN002
+VH
+VM
GND
-VM
-VH
52
32
-32
-52
D101
GBU4DL-6419
C112
3300/50
C001
0.1
C109
0.1
C002
0.1
C110
0.1
C111
3300/50
C107 0.1
C108 0.1
C003
0.1
C004
0.1
R109
27k
R110
47k
R111
47k
R112
27k
PR106 10A 60V
PR103 10A 60V
PT1
PT.AMA-3 EZ
TF
D102
GBU6JL-6131
R006
47k
R005
47k
R007
47k
R008
47k
C113
3300/65
C005
0.1
C103
0.1
C006
0.1
C105
0.1
C114
3300/65
C104
0.1
C007
0.1
C106
0.1
C008
0.1
D013
1SS133
D001
1SS133
D014
1SS133
D002
1SS133
D011
1SS133
D003
1SS133
D012
1SS133
D004
1SS133
D015
1SS133
D005
1SS133
D017
1SS133
D007
1SS133
R001
8.2k
R002
3.3k
R003
10k
R004
10k
R102
100
1/4W
Q102
KTC3199
GR
RESET
C116
3.3/50
R103
33k
Q101
DTC114ES
RESET
D107
1SS133
RY102
AC12VSDT-S-112LMR
RY102
D108 1SS133
D109 1SS133
D103 1SS133
D104 1SS133
D105 1SS133
D106 1SS133
C101
470/25
PT2 SUB ANF-8 (E)
FC101
F101
4A 250V
FC104
T101
T102
AC 230V
50HZ
C102
0.1
W3
CNA001
CN1
FROM A MAIN C.B (1/4) AMP SECTION WH001
VS1
VS2
GND
GND
FL1
FL2
P-ON
VSTBY
RESET
19VAC
19VAC
0
2.5VAC
2.5VAC
12.0

WIRING – 7 (DECK / HEAD-1 / HEAD-2)



15
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A
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D
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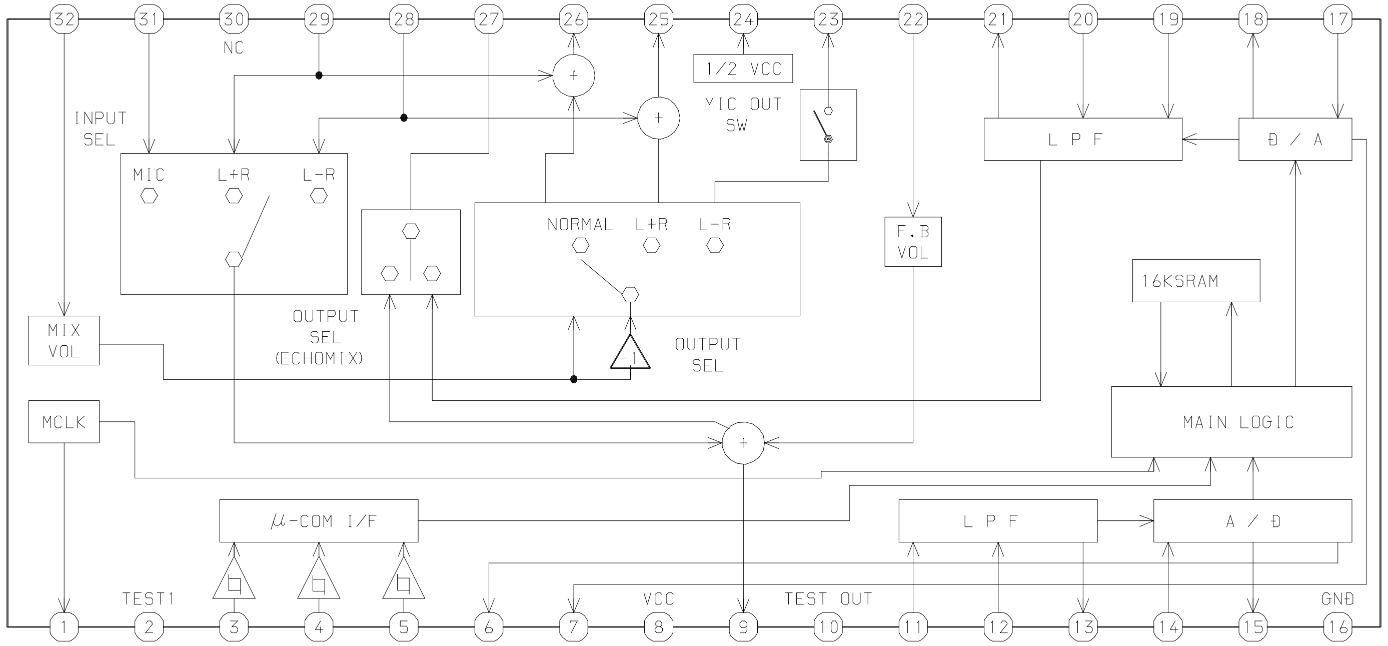
H
I
J
K
L
M
N
O
P
Q
R
S
T
U
L DECK C.B
IC1
1 2 3
SW1
SW2
SW3
SOL1 (DECK1)
(CST1) SW1
(CAM1) SW2
(LH1) SW3
(DECK MOTOR) M1
M
– + H L
W1
SW4
SW5
(REA) SW4
(LH2) SW5
FROM B MICON C.B CN104
FC104
15 13 11 9 7 5 3 1
CON502
IC2
1 2 3
SW6
(CST2) SW6
R1
R2
R3
Q1
B C E
SW8
(CAM2) SW8
SFR1
SW9
(REB) SW9
SOL2 (DECK2)
M HEAD-1 C.B
<RED>
<BLK>
<WHT>
<GRY>
<WHT>
<BLK>
<RED>
CON301
1 2 3
TO A MAIN C.B CN301
P HEAD (DECK-1)
N HEAD-2 C.B
<WHT>
<RED>
<BLK>
<WHT>
<RED>
<WHT>
<BLK>
<GRY>
<BRN>
<BLK>
<WHT>
<WHT>
<RED>
<RED>
<WHT>
CON351
1 2 3 4 5 6 7 8
TO A MAIN C.B CN351
E/RP HEAD (DECK-2)

IC BLOCK DIAGRAM

IC, M65849BFP631D



32
31
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18
17
NC
1/2 VCC
MIC OUT
SW
INPUT
SEL
MIC
L+R
L-R
NORMAL
L+R
L-R
F.B
VOL
L P F
D / A
16KSRAM
MIX
VOL
OUTPUT
SEL
(ECHOMIX)
OUTPUT
SEL
-1
MCLK
MAIN LOGIC
μ-COM I/F
L P F
A / D
TEST1
VCC
TEST OUT
GND
1
2
3
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9
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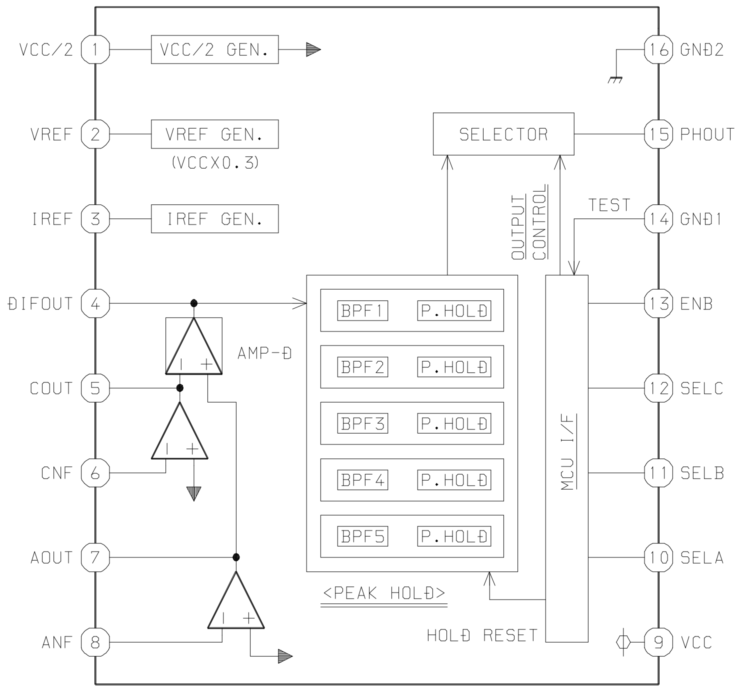
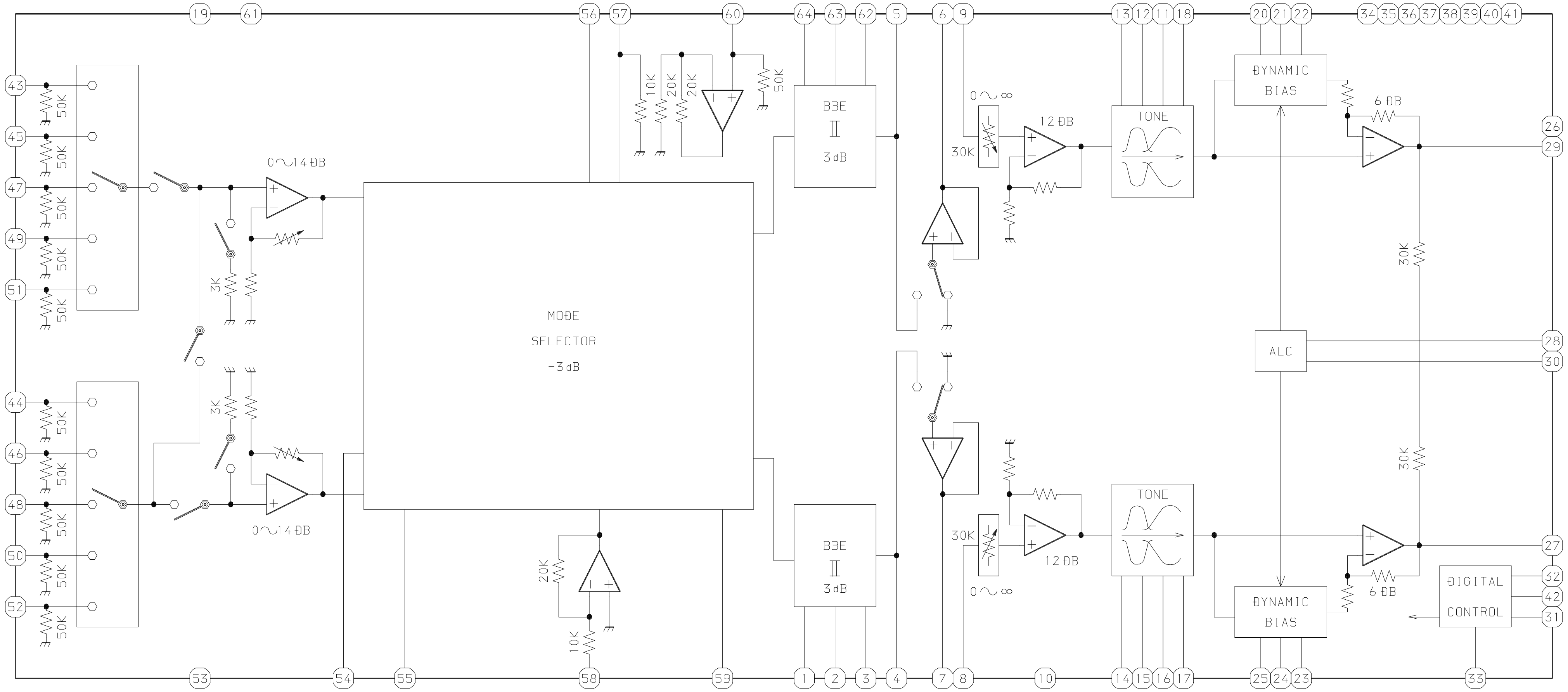
15
16

IC, M61506FP



VCC/2
1
VCC/2 GEN.
VREF
2
VREF GEN.
(VCCX0.3)
IREF
3
IREF GEN.
DIFOUT
4
COUT
5
CNF
6
AOUT
7
ANF
8
AMP-D
BPF1
P.HOLD
BPF2
P.HOLD
BPF3
P.HOLD
BPF4
P.HOLD
BPF5
P.HOLD
<PEAK HOLD>
HOLD RESET
SELECTOR
OUTPUT
CONTROL
TEST
MCU I/F
16
GND2
15
PHOUT
14
GND1
13
ENB
12
SELC
11
SELB
10
SELA
9
VCC

IC, BD3876KS2



19
61
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40
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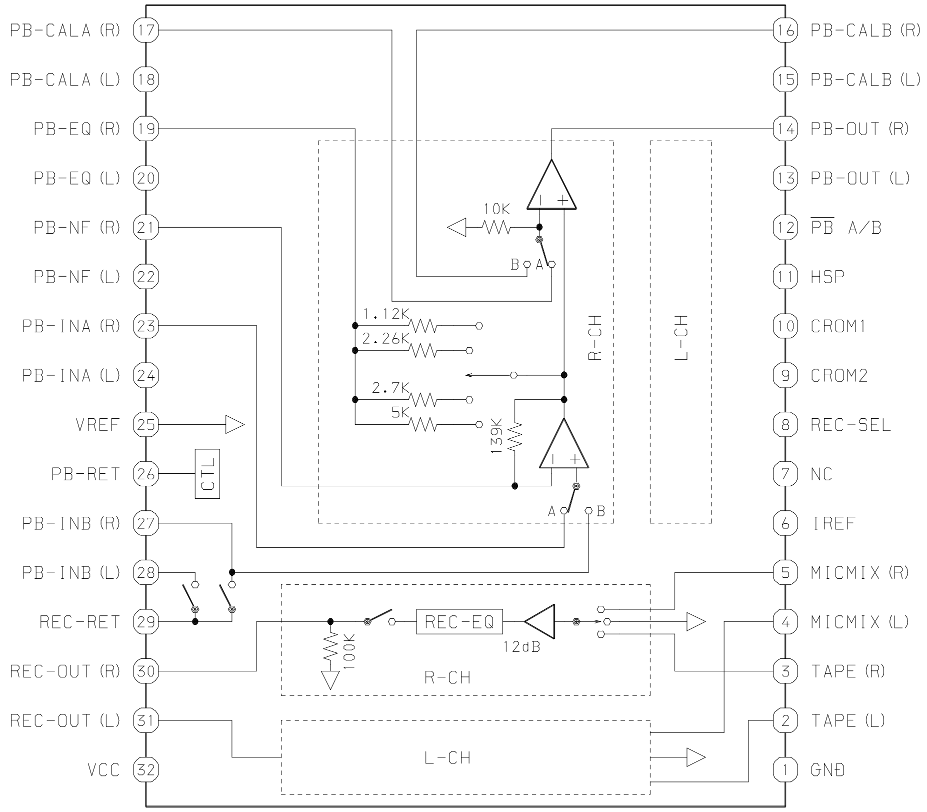
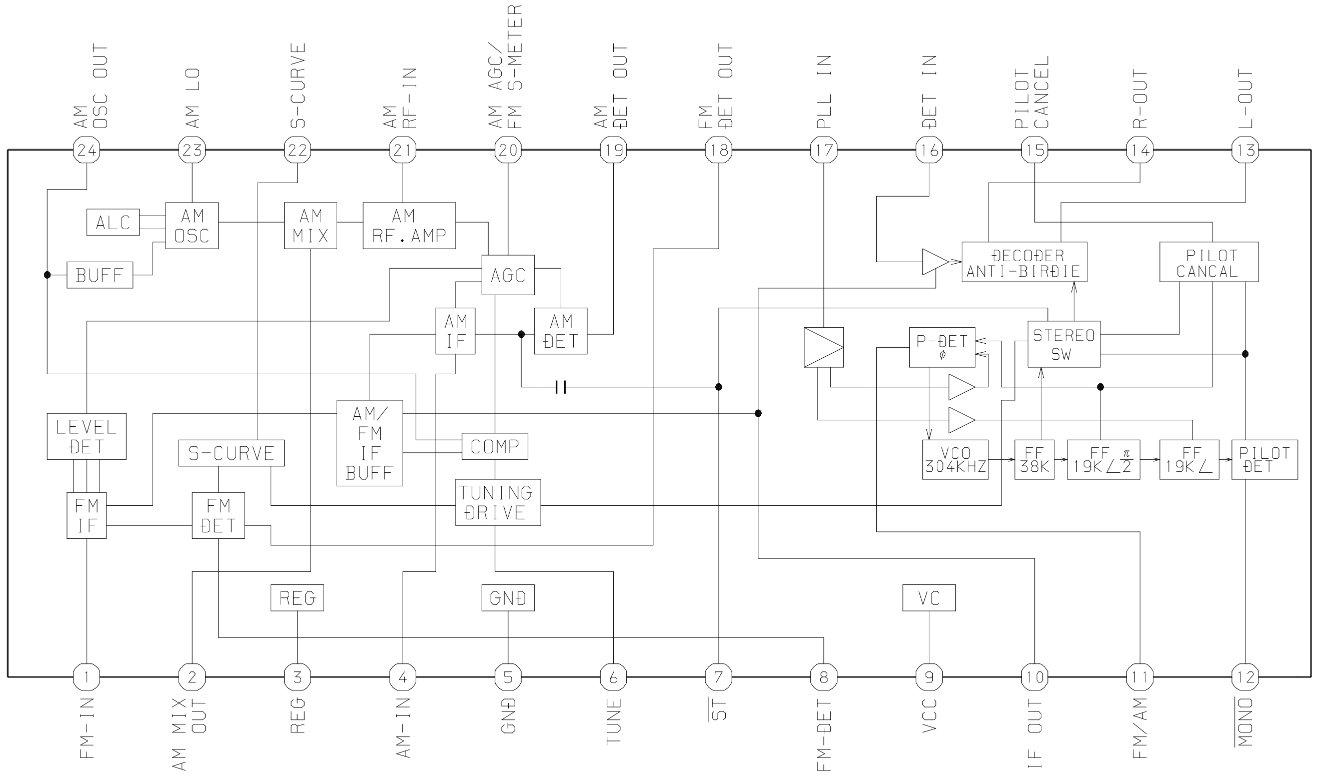
43
45
47
49
51
44
46
48
50
52
50K
0∼14DB
3K
10K
20K
20K
50K
BBE
II
3dB
MODE
SELECTOR
-3dB
0∼∞
30K
12DB
TONE
DYNAMIC
BIAS
6DB
30K
ALC
26
29
28
30
27
32
42
31
DIGITAL
CONTROL
20K
10K
53
54
55
58
59
1
2
3
4
7
8
10
14
15
16
17
25
24
23
33

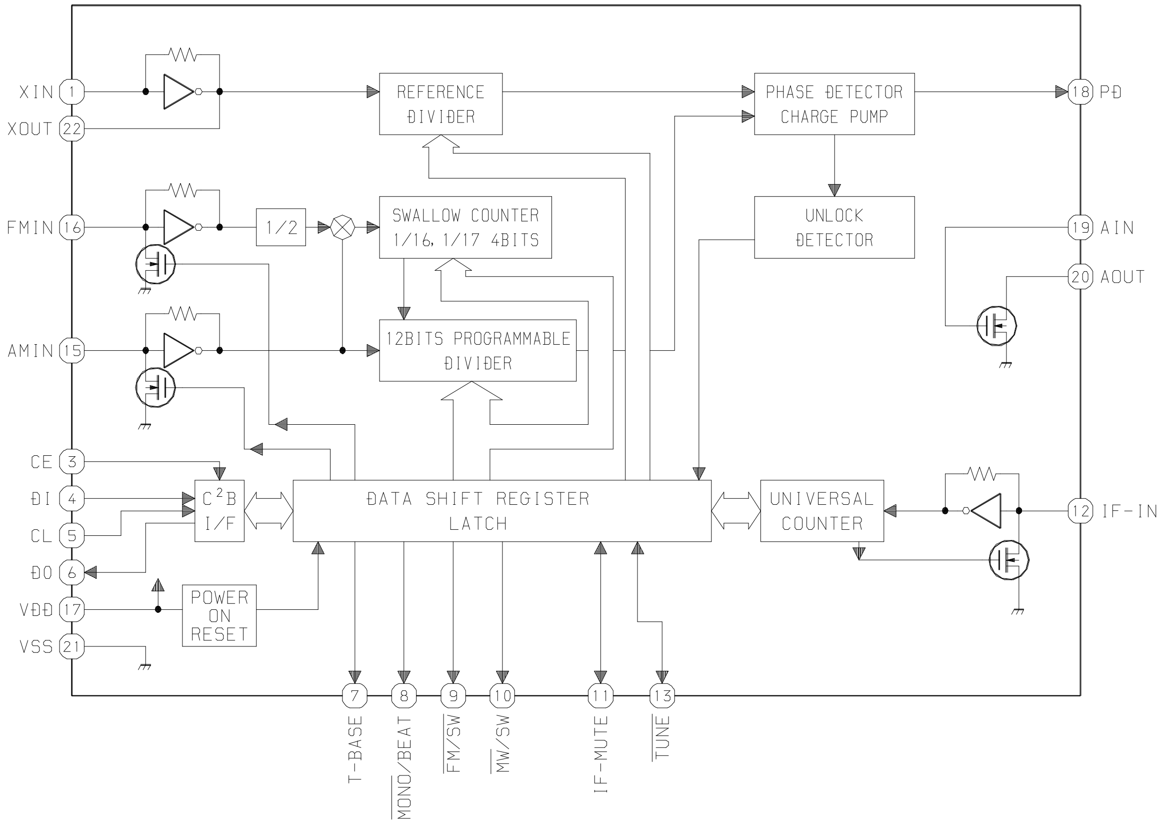
IC, BA7762AFS


PB-CALA (R) 17
PB-CALA (L) 18
PB-EQ (R) 19
PB-EQ (L) 20
PB-NF (R) 21
PB-NF (L) 22
PB-INA (R) 23
PB-INA (L) 24
VREF 25
PB-RET 26
CTL
PB-INB (R) 27
PB-INB (L) 28
REC-RET 29
REC-OUT (R) 30
REC-OUT (L) 31
VCC 32
16 PB-CALB (R)
15 PB-CALB (L)
14 PB-OUT (R)
13 PB-OUT (L)
12 PB A/B
11 HSP
10 CROM1
9 CROM2
8 REC-SEL
7 NC
6 IREF
5 MICMIX (R)
4 MICMIX (L)
3 TAPE (R)
2 TAPE (L)
1 GND
10K
B A
1.12K
2.26K
2.7K
5K
139K
A B
R-CH
L-CH
100K
REC-EQ
12dB
R-CH
L-CH

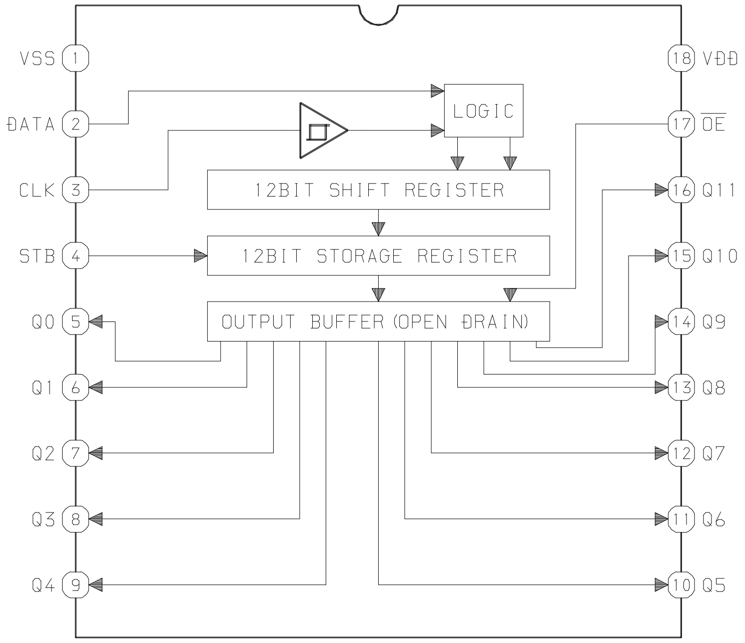
IC, LA1843


AM OSC OUT 24
AM LO 23
S-CURVE 22
AM RF-IN 21
AM AGC/ FM S-METER 20
AM DET OUT 19
FM DET OUT 18
PLL IN 17
DET IN 16
PILOT CANCEL 15
R-OUT 14
L-OUT 13
ALC
AM OSC
BUFF
AM MIX
AM RF.AMP
AGC
AM IF
AM DET
DECODER ANTI-BIRDIE
PILOT CANCAL
P-DET
STEREO SW
LEVEL DET
S-CURVE
AM/ FM IF BUFF
COMP
TUNING DRIVE
VCO 304KHZ
FF 38K
FF 19K
FF 19K
PILOT DET
FM IF
FM DET
REG
GND
VC
1 FM-IN
2 AM MIX OUT
3 REG
4 AM-IN
5 GND
6 TUNE
7 ST
8 FM-DET
9 VCC
10 IF OUT
11 FM/AM
12 MONO

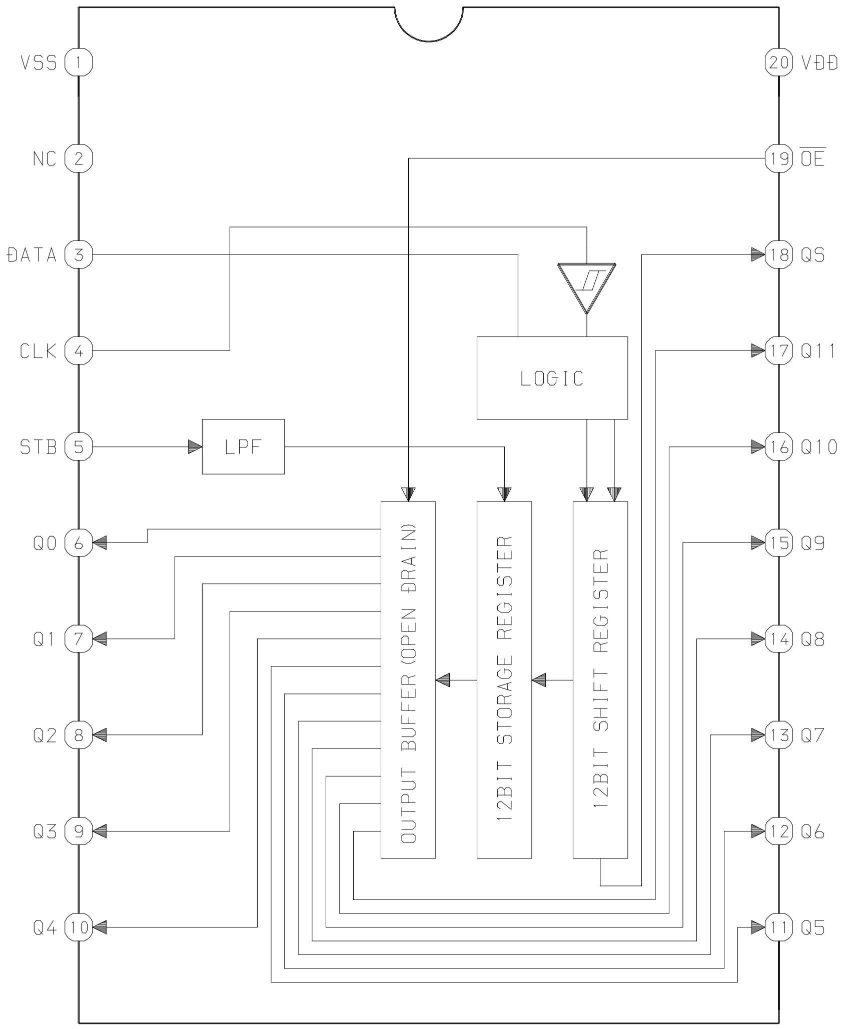
IC, LC72131D


XIN 1
XOUT 22
FMIN 16
AMIN 15
CE 3
DI 4
CL 5
DO 6
VDD 17
VSS 21
REFERENCE DIVIDER
PHASE DETECTOR CHARGE PUMP
1/2
SWALLOW COUNTER 1/16, 1/17 4BITS
UNLOCK DETECTOR
12BITS PROGRAMMABLE DIVIDER
C2B I/F
DATA SHIFT REGISTER LATCH
UNIVERSAL COUNTER
POWER ON RESET
18 PD
19 AIN
20 AOUT
12 IF-IN
7 T-BASE
8 MONO/BEAT
9 FM/SW
10 MW/SW
11 IF-MUTE
13 TUNE

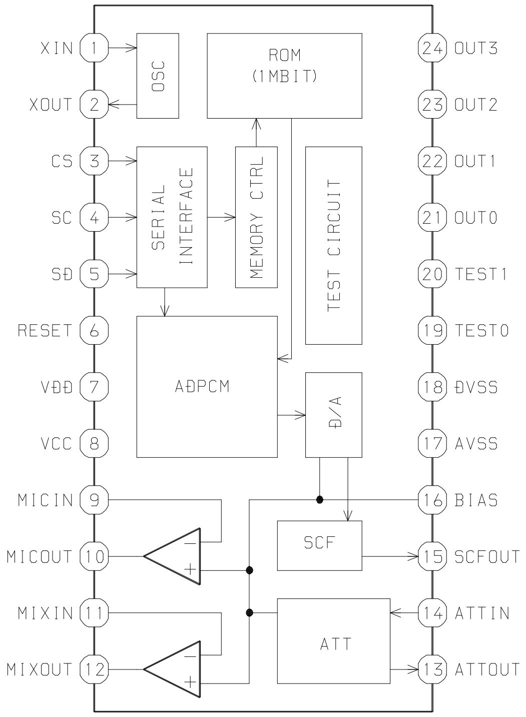
IC, BU2092F


VSS 1
DATA 2
CLK 3
STB 4
Q0 5
Q1 6
Q2 7
Q3 8
Q4 9
LOGIC
12BIT SHIFT REGISTER
12BIT STORAGE REGISTER
OUTPUT BUFFER (OPEN DRAIN)
18 VDD
17 OE
16 Q11
15 Q10
14 Q9
13 Q8
12 Q7
11 Q6
10 Q5

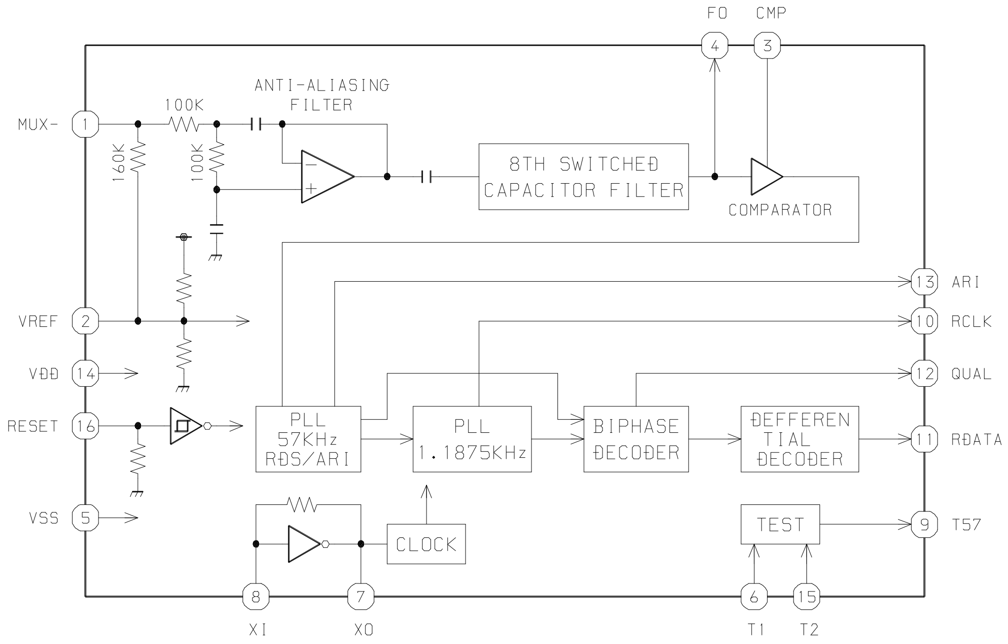
IC, BU2099FV


VSS 1
NC 2
DATA 3
CLK 4
STB 5
Q0 6
Q1 7
Q2 8
Q3 9
Q4 10
20 VDD
19 OE
18 QS
17 Q11
16 Q10
15 Q9
14 Q8
13 Q7
12 Q6
11 Q5
LOGIC
LPF
OUTPUT BUFFER (OPEN DRAIN)
12BIT STORAGE REGISTER
12BIT SHIFT REGISTER

IC, BU9990-03FS


XIN 1
XOUT 2
CS 3
SC 4
SD 5
RESET 6
VDD 7
VCC 8
MICIN 9
MICOUT 10
MIXIN 11
MIXOUT 12
24 OUT3
23 OUT2
22 OUT1
21 OUT0
20 TEST1
19 TEST0
18 DVSS
17 AVSS
16 BIAS
15 SCFOUT
14 ATTIN
13 ATTOUT
OSC
ROM (1MBIT)
SERIAL INTERFACE
MEMORY CTRL
TEST CIRCUIT
ADPCM
D/A
SCF
ATT

IC, BU1920FS


FO 4
CMP 3
MUX- 1
VREF 2
VDD 14
RESET 16
VSS 5
100K
160K
100K
ANTI-ALIASING FILTER
8TH SWITCHED CAPACITOR FILTER
COMPARATOR
PLL 57KHz RDS/ARI
PLL 1.1875KHz
BIPHASE DECODER
DEFFERENTIAL DECODER
CLOCK
TEST
13 ARI
10 RCLK
12 QUAL
11 RDATA
9 T57
8 XI
7 XO
6 T1
15 T2

IC DESCRIPTION

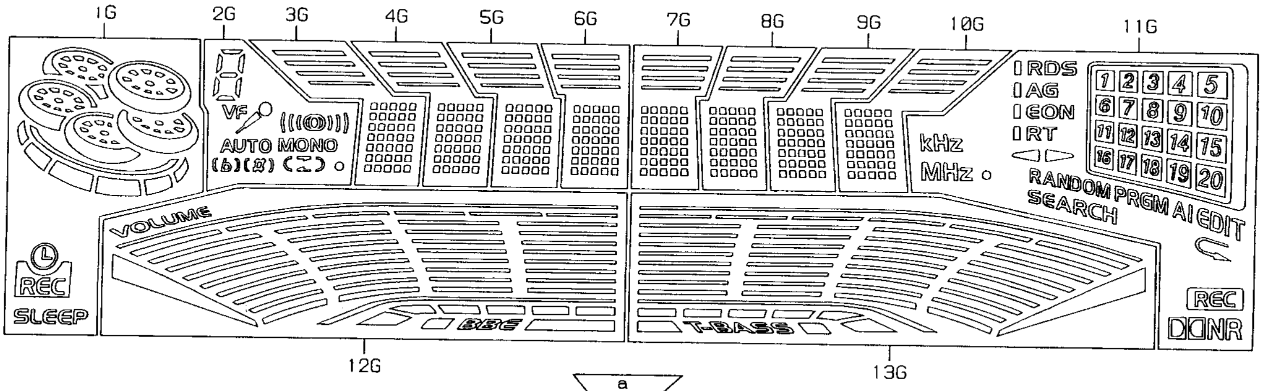
IC, LC876580W-5P55

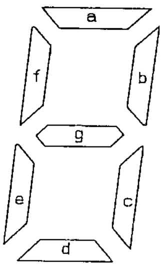
Pin No.	Pin Name	I/O	Description
1	M-CLK	O	Common serial clock.
2	M-DATA	O	Common serial data.
3	M-STB	O	Common serial strobe.
4	PLL-CE	O	Tuner PLL IC chip enable.
5	SR-LCK	O	Shift register IC LATCH clock.
6	RYM-CS	O	RHYTHM IC chip select.
7	POWER	O	Audio power ON/OFF.
8	MUTE	O	System MUTE ON/OFF.
9	$\overline{\text{C-SHIFT}}$	O	CLOCK SHIFT output. "L" : SHIFT
10	$\overline{\text{HP-MUTE}}$	I	Head phone jack detection. "L" : MUTE
11	RESET	I	System RESET input.
12	RTVR	I	Volume rotary encoder.
13	JOG	I	Dial JOG rotary encoder.
14	GND	–	Connected to GND.
15	CF1	I	Oscillator circuit input.
16	CF2	O	Oscillator circuit output.
17	VDD	–	Power supply.
18	HOLD	I	System HOLD input.
19	KEY1	I	Tact key matrix 1 input.
20	KEY2	I	Tact key matrix 2 input.
21	KEY3	I	Tact key matrix 3 input.
22	CD-SW	I	CD MECHA SW matrix input.
23	DISH	I	CD turntable photo sensor.
24	SPEANA	I	Spectrum analyser level detection.
25	MIC	I	MIC input level detection.
26	RDS-SG	I	RDS signal level input.
27	TM-BASE	I	Time base clock input.
28	CD-WRQ/ RDS-CLK	I	CD Read Write Request / Tuner RDS clock input.
29	REM	I	Remote control signal input.
30 ~ 42	G13 ~ G1	O	FL grid G13 ~ G1 output.
43 ~ 45	P38 ~ P36	O	FL segment P38 ~ P36 output.
46	VDD	–	Power supply.
47	P35/SPEANA–A	O	FL segment P35 output / Spectrum analyser BPF switching control A output.
48	P34/SPEANA–B	O	FL segment P34 output / Spectrum analyser BPF switching control B output.
49	P33/SPEANA–C	O	FL segment P33 output / Spectrum analyser BPF switching control C output.
50	P32/CSNDEMO	O/I	FL segment P32 output / Initial DEMO MODE detect. "H" : CASINO DEMO (Not used).
51	–VP	–	Power supply for FL.
52	P31/TU3	O/I	FL segment P31 output / TUNER series, TU3 select.
53	P30/TU2	O/I	FL segment P30 output / TUNER series, TU2 select.
54	P29/TU1	O/I	FL segment P29 output / TUNER series, TU1 select.
55	P28/$\overline{\text{DSP}}$	O/I	FL segment P28 output / DSP function detection. "L" : ON (Not used).

Pin No.	Pin Name	I/O	Description
56	P27/RHYTHM	O/I	FL segment P27 output / RHYTHM function detection. "H" : ON (Not used)
57	P26/KEYCON	O/I	FL segment P26 output / KEYCON function detection. "H" : ON
58	P25/5MODE	O/I	FL segment P25 output / GEQ 5MODE select. "H" : 5 MODE (Not used)
59	P24/$\overline{\text{ECO}}$	O/I	FL segment P24 output / ECO mode detection. "H" : ECO OFF (Not used)
60	P23	O/I	FL segment P23 output.
61	P22	O/I	FL segment P22 output.
62	P21/5.1+DLPRO	O/I	FL segment P21 output / 5.1CH+PROLOGIC detection. "H" : ON
63	P20/DLPRO	O/I	FL segment P20 output / DOLBY PROLOGIC detection. "H" : ON (Not used)
64	P19/$\overline{\text{CST2}}$	O/I	FL segment P19 output / Deck 2 cassette detection. "L" : ON
65	P18/$\overline{\text{REB}}$	O/I	FL segment P18 output / Deck 2 side B recordable SW. "L" : REC
66	P17/$\overline{\text{CAM2}}$	O/I	FL segment P17 output / Deck 2 CAM SW input. "L" : ON
67	P16/AUTO1	O/I	FL segment P16 output / Deck 1 auto stop input.
68	P15/AUTO2	O/I	FL segment P15 output / Deck 2 auto stop input.
69	P14/$\overline{\text{CAM1}}$	O/I	FL segment P14 output / Deck 1 CAM SW input. "L" : ON
70	P13/$\overline{\text{CST1}}$	O/I	FL segment P13 output / Deck 1 cassette detection SW. "L" : ON
71	P12/$\overline{\text{REA}}$	O/I	FL segment P12 output / Deck 2 side-A recordable SW. "L" : REC
72	VDD	–	Power supply.
73 ~ 83	P11 ~ P1	O	FL segment P11 ~ P1 output.
84	P39	O	FL segment P39 output.
85	$\overline{\text{KEYSCAN}}$	O	KEYSCAN output. "L" : ON
86	$\overline{\text{MOTOR}}$	O	DECK motor ON/OFF control. "L" : ON
87	$\overline{\text{SOL1}}$	O	DECK 1 solenoid control. "L" : ON
88	$\overline{\text{SOL2}}$	O	DECK 2 solenoid control. "L" : ON
89	GND	–	Connected to GND.
90	VDD	–	Power supply.
91	DISH-RVS	O	CD dish reverse output. "H" : REV
92	DISH-FWD	O	CD dish forward output. "H" : FWD
93	$\overline{\text{OPEN}}$	O	CD tray OPEN output. "L" : OPEN
94	$\overline{\text{CLOSE}}$	O	CD tray CLOSE output. "L" : CLOSE
95	CD-DATA/ RDS DATA	O/I	Serial data output to CD. RDS serial data input.
96	CD-XLT	O	CD DSP serial LATCH output. (Chip enable)
97	CD-CLK	O	CD DSP serial CLOCK output.
98	CD-LED	O	CD flash window LED control.
99	CD-SUBQ/IFC	I	CD SUBQ (Sub code) serial data input / TUNER IF COUNT data input.
100	DRF/STEREO	I	RF (radio frequency) detect / TUNER STEREO signal input.

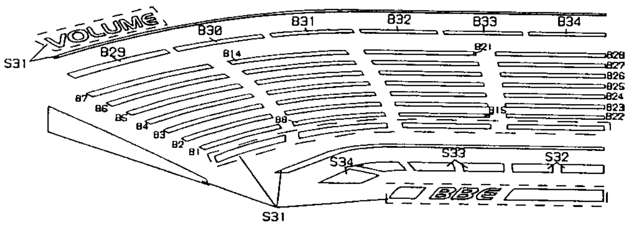
FL (BJ751GNK) GRID ASSIGNMENT AND ANODE CONNECTION

GRID ASSIGNMENT

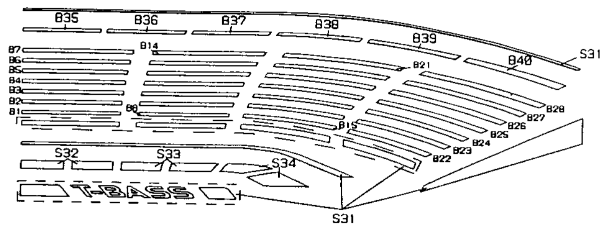

1G
2G
3G
4G
5G
6G
7G
8G
9G
10G
11G
VF
AUTO MONO
RDS
AG
EON
RT
kHz
MHz
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
RANDOM PRGM AI EDIT
SEARCH
VOLUME
REC
SLEEP
BBE
T-BASS
REC
DNR
12G
13G



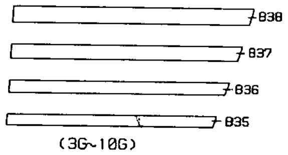
(2G)


VOLUME
S31
B30
B31
B32
B33
B34
B29
B14
B21
B28
B27
B26
B25
B24
B23
B22
B7
B6
B5
B4
B3
B2
B1
B8
B15
S34
S33
S32
BBE
S31

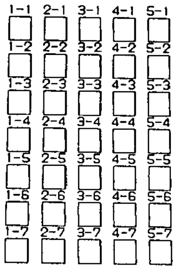
(12G)


B35
B36
B37
B38
B39
B40
S31
B7
B6
B5
B4
B3
B2
B1
B14
B21
B8
B15
B28
B27
B26
B25
B24
B23
B22
S32
S33
S34
T-BASS
S31

(13G)


B38
B37
B36
B35

(3G~10G)


1-1
2-1
3-1
4-1
5-1
1-2
2-2
3-2
4-2
5-2
1-3
2-3
3-3
4-3
5-3
1-4
2-4
3-4
4-4
5-4
1-5
2-5
3-5
4-5
5-5
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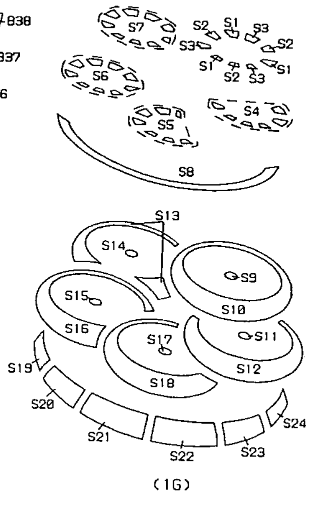
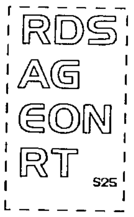
3-7
4-7
5-7

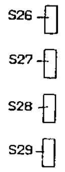
(3G~10G)


S7
S2
S1
S3
S30
S2
S1
S2
S3
S1
S6
S4
S5
S8
S13
S14
S9
S15
S10
S16
S17
S11
S19
S18
S12
S20
S24
S21
S22
S23

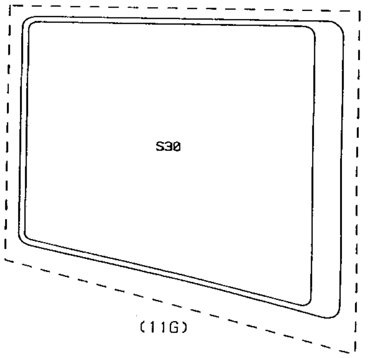
(1G)


RDS
AG
EON
RT
S25

(11G)


S26
S27
S28
S29

(11G)



(11G)

ANODE CONNECTION

	1G	2G	3G	4G	5G	6G	7G	8G	9G	10G	11G	12G	13G
P1	SLEEP	–	1–1	1–1	1–1	1–1	1–1	1–1	1–1	1–1	S30	S31	S31
P2	REC	–	2–1	2–1	2–1	2–1	2–1	2–1	2–1	2–1	1	S32	S32
P3	🕒	–	3–1	3–1	3–1	3–1	3–1	3–1	3–1	3–1	2	S33	S33
P4	S1	–	4–1	4–1	4–1	4–1	4–1	4–1	4–1	4–1	3	S34	S34
P5	S2	–	5–1	5–1	5–1	5–1	5–1	5–1	5–1	5–1	4	B1	B1
P6	S3	–	1–2	1–2	1–2	1–2	1–2	1–2	1–2	1–2	5	B8	B8
P7	S9	–	2–2	2–2	2–2	2–2	2–2	2–2	2–2	2–2	6	B15	B15
P8	S10	–	3–2	3–2	3–2	3–2	3–2	3–2	3–2	3–2	7	B22	B22
P9	S7	–	4–2	4–2	4–2	4–2	4–2	4–2	4–2	4–2	8	B2	B2
P10	S14	–	5–2	5–2	5–2	5–2	5–2	5–2	5–2	5–2	9	B9	B9
P11	S13	a	1–3	1–3	1–3	1–3	1–3	1–3	1–3	1–3	10	B16	B16
P12	S11	b	2–3	2–3	2–3	2–3	2–3	2–3	2–3	2–3	11	B23	B23
P13	S4	f	3–3	3–3	3–3	3–3	3–3	3–3	3–3	3–3	12	B3	B3
P14	S12	g	4–3	4–3	4–3	4–3	4–3	4–3	4–3	4–3	13	B10	B10
P15	S6	c	5–3	5–3	5–3	5–3	5–3	5–3	5–3	5–3	14	B17	B17
P16	S15	e	1–4	1–4	1–4	1–4	1–4	1–4	1–4	1–4	15	B24	B24
P17	S16	d	2–4	2–4	2–4	2–4	2–4	2–4	2–4	2–4	16	B4	B4
P18	S5	VF	3–4	3–4	3–4	3–4	3–4	3–4	3–4	3–4	17	B11	B11
P19	S17	🎤	4–4	4–4	4–4	4–4	4–4	4–4	4–4	4–4	18	B18	B18
P20	S18	(((●)))	5–4	5–4	5–4	5–4	5–4	5–4	5–4	5–4	19	B25	B25
P21	S8	AUTO	1–5	1–5	1–5	1–5	1–5	1–5	1–5	1–5	20	B5	B5
P22	S19	MONO	2–5	2–5	2–5	2–5	2–5	2–5	2–5	2–5	S25	B12	B12
P23	S20	(♭)	3–5	3–5	3–5	3–5	3–5	3–5	3–5	3–5	S26	B19	B19
P24	S21	(♯)	4–5	4–5	4–5	4–5	4–5	4–5	4–5	4–5	S27	B26	B26
P25	S22	(	5–5	5–5	5–5	5–5	5–5	5–5	5–5	5–5	S28	B6	B6
P26	S23	⇄	1–6	1–6	1–6	1–6	1–6	1–6	1–6	1–6	S29	B13	B13
P27	S24	)	2–6	2–6	2–6	2–6	2–6	2–6	2–6	2–6	◁	B20	B20
P28	–	○	3–6	3–6	3–6	3–6	3–6	3–6	3–6	3–6	▷	B27	B27
P29	–	–	4–6	4–6	4–6	4–6	4–6	4–6	4–6	4–6	DCNR	B7	B7
P30	–	–	5–6	5–6	5–6	5–6	5–6	5–6	5–6	5–6	REC	B14	B14
P31	–	–	1–7	1–7	1–7	1–7	1–7	1–7	1–7	1–7	↩	B21	B21
P32	–	–	2–7	2–7	2–7	2–7	2–7	2–7	2–7	2–7	EDIT	B28	B28
P33	–	–	3–7	3–7	3–7	3–7	3–7	3–7	3–7	3–7	AI	B29	B35
P34	–	–	4–7	4–7	4–7	4–7	4–7	4–7	4–7	4–7	PRGM	B30	B36
P35	–	–	5–7	5–7	5–7	5–7	5–7	5–7	5–7	5–7	RANDOM	B31	B37
P36	–	–	B38	B38	B38	B38	B38	B38	B38	B38	SEARCH	B32	B38
P37	–	–	B37	B37	B37	B37	B37	B37	B37	B37	○	B33	B39
P38	–	–	B36	B36	B36	B36	B36	B36	B36	B36	MHz	B34	B40
P39	–	–	B35	B35	B35	B35	B35	B35	B35	B35	kHz	–	–

ADJUSTMENT <TUNER / DECK / MICON>

< TUNER SECTION >

1. Clock Frequency Check
   Settings : • Test point : TP2 (CLK)
   Method : Set to MW 1602kHz and check that the test point is 2052kHz ± 45Hz.

2. MW VT Check
   Settings : • Test point : TP1 (VT)
   Method : Set to MW 1602kHz and check that the test point is less than 8.0V. Then set to MW 531kHz and check that the test point is more than 0.6V.

3. MW Tracking Adjustment
   Settings : • Test point : TP5 (Lch), TP6 (Rch)
   • Adjustment location : L951 (1/3)
   Method : Set to MW 999kHz and adjust L951 (1/3) so that the test point becomes maximum.

4. LW VT Adjustment
   Settings : • Test point : TP1 (VT)
   • Adjustment location : L942
   Method : Set to LW 144kHz and adjust L942 so that the test point becomes 1.5V ± 0.05V.
   Then set to LW 290kHz and check that the test point is less than 8.0V.

5. LW Tracking Adjustment
   Settings : • Test point : TP5 (Lch), TP6 (Rch)
   • Adjustment location :
   L941 .... 144kHz
   TC942 .... 290kHz
   Method : Set up TC942 to center before adjustment. The level at 144kHz is adjusted to maximum by L941. Then the level at 290kHz is adjusted to maximum by TC942.

6. AM IF Adjustment
   Settings : • Test point : TP5 (Lch), TP6 (Rch)
   • Adjustment location :
   L802 .... 450kHz

7. FM VT Check
   Settings : • Test point : TP1 (VT)
   Method : Set to FM 108.0MHz and check that the test point is less than 8.0V. Then set to FM 87.5MHz and check that the test point is more than 0.5V.

8. FM Tracking Check
   Settings : • Test point : TP5 (Lch), TP6 (Rch)
   Method : Set to FM 98.0MHz and check that the test point is less than 13dBμV.

9. DC Balance / Mono Distortion Adjustment
   Settings : • Test point : TP3, TP4 (DC balance)
   • Adjustment location : L801
   • Input level : 60dBμV
   Method : Set to FM 98.0MHz and adjust L801 so that the distortion is minimum. Then check the voltage between TP3 and TP4 is 0V ± 300mV.

10. Output Level Check
    <MW>
    Settings : • Test point : TP5 (Lch), TP6 (Rch)
    • Input level : 74dBμV
    Method : Set to MW 999kHz and check that the test point is 80mV ± 3dB.

    <FM>
    Settings : • Test point : TP5 (Lch), TP6 (Rch)
    • Input level : 60dBμV
    Method : Set to FM 98.0MHz and check that the test point is 315mV ± 3dB.

11. FM Separation Check
    Settings : • Test point : TP5 (Lch), TP6 (Rch)
    • Input level : 60dBμV
    Method : Set to FM 98.0MHz and check that the test point is more than 12dB.

< DECK SECTION >

12. Tape Speed Adjustment (DECK 2)
    Settings : • Test tape : TTA–100
    • Test point : TP5(Lch), TP6(Rch)
    • Adjustment location : SFR1
    Method : Play back the test tape and adjust SFR1 so that the frequency counter reads 3000Hz ± 5Hz and ± 45Hz (REV) with respect to forward speed.

13. Head Azimuth Adjustment (DECK 1, DECK 2)
    Settings : • Test tape : TTA–330
    • Test point : TP5(Lch), TP6(Rch)
    • Adjustment location : Head azimuth adjustment screw
    Method : Play back (FWD) the 8kHz signal of the test tape and adjust screw so that the output becomes maximum. Next, perform on REV PLAY mode.

14. PB Frequency Response Check (DECK 1, DECK 2)
    Settings : • Test tape : TTA–330
    • Test point :TP5(Lch), TP6(Rch)
    Method : Play back the 315Hz and 8kHz signals of the test tape and check that the output ratio of the 8kHz signal with respect to that of the 315Hz signal is within 5dB.

15. PB Sensitivity Check (DECK 1, DECK 2)
    Settings : • Test tape : TTA–200
    • Test point : TP5(Lch), TP6(Rch)
    Method : Play back the test tape and check that the output level of the test point is 230mV ± 3dB.

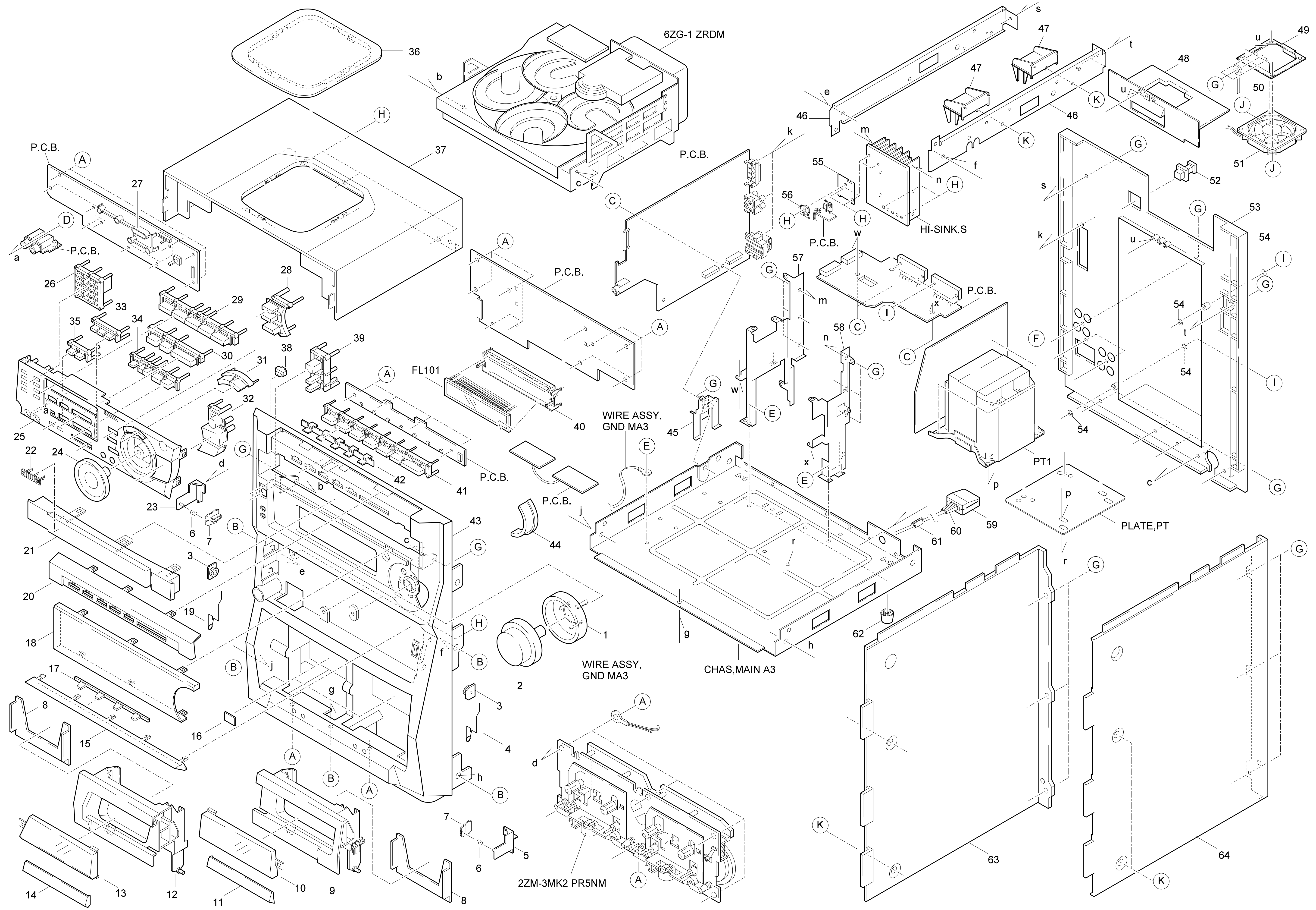
16. REC/PB Frequency Response Adjustment (DECK 2)
    Settings : • Test tape : TTA–602
    • Test point : TP5(Lch), TP6(Rch)
    • Input signal : 1kHz / 10kHz (LINE IN)
    • Adjustment location : SFR351 (Lch)
    SFR352 (Rch)
    Method : Apply a 1kHz signal and REC mode. Then adjust OSC attenuator so that the output level at the TP5, TP6 becomes -20VU (16mV). Record and play back the 1kHz and 10kHz signals and adjust SFRs so that the output of the 10kHz signals becomes 0dB ± 0.5dB with respect to that of the 1kHz signal.

17. REC/PB Sensitivity Check (DECK 2)
    Settings : • Test tape : TTA–602
    • Test point : TP5(Lch), TP6(Rch)
    • Input signal : 1kHz (LINE IN)
    Method : Apply a 1kHz signal and REC mode. Then adjust OSC attenuator so that the output level at TP5, TP6 becomes 0VU (160mV). Record and play back the 1kHz signals and check that the output is 0dB ± 3.5dB.

< MICON SECTION >

18. µ-CON OSC Adjustment
    Settings : • Test point : TP7 (O-KSCAN)
    • Adjustment location : L101
    Method : Insert AC plug while pressing POWER and TUNER function key. Adjust L101 so that the frequency at the test point is 208.80Hz ± 0.21Hz.

MECHANICAL EXPLODED VIEW 1 / 1



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6ZG-1 ZRDM
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P.C.B.
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P.C.B.
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GND MA3
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WIRE ASSY,
GND MA3
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64
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MECHANICAL PARTS LIST 1 / 1

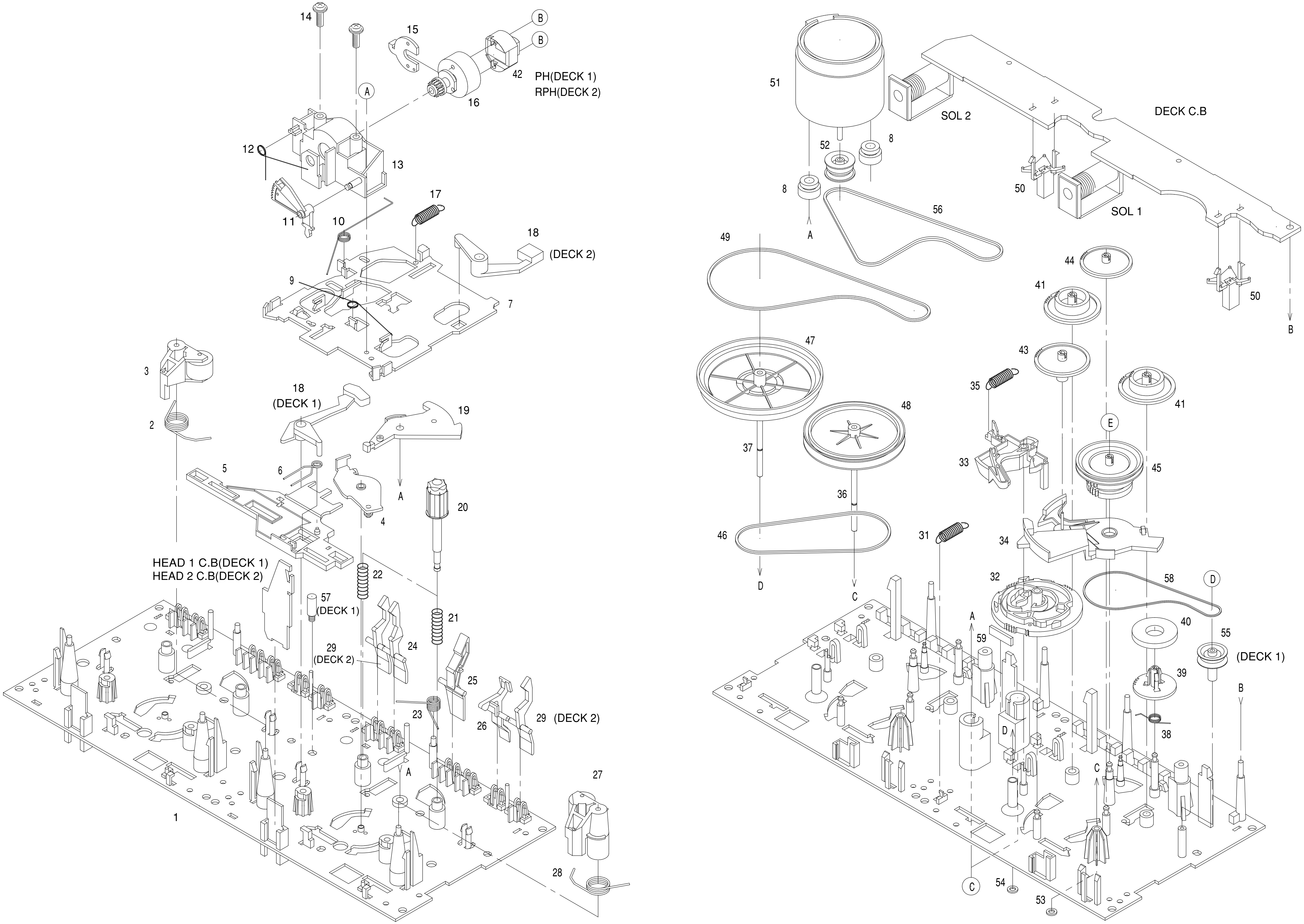
REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	8A-MA3-094-010		RING,MAIN
2	8A-MA3-090-110		KNOB,RTRY MAIN
3	87-NF8-220-110		DMPR,150
4	82-NF5-219-010		SPR-T,EJECT 2 (SIN)
5	87-NF4-217-110		HLDR,LOCK 2
6	86-NF9-224-010		SPR-C,LOCK
7	82-NF5-229-010		PLATE,LOCK
8	86-NF6-061-010		REFLECTOR,CASS
9	8A-MA3-026-110		BOX,CASS R
10	8A-MA3-056-010		WINDOW,CASS R
11	8A-MA3-036-010		PANEL,CASS R 3
12	8A-MA3-025-110		BOX,CASS L
13	8A-MA3-055-010		WINDOW,CASS L
14	8A-MA3-035-010		PANEL,CASS L 3
15	8A-MA3-041-010		PANEL,FUN 5F
16	81-532-080-010		LABEL, CASS. COMPT
17	8A-MA3-102-010		REFLECTOR,FUN 5F
18	8A-MA3-050-010		WINDOW,DISP
19	82-NF5-218-010		SPR-T,EJECT 1 (SIN)
20	8A-MA3-034-010		PANEL,CD LED
21	8A-MA3-037-010		PANEL ASSY,TRAY 3
22	87-B00-002-010		BADGE AIWA 30 ABS S1
23	87-NF4-216-010		HLDR,LOCK 1
24	8A-MA3-093-010		KNOB ASSY,RTRY JOG
25	8A-MA3-032-010		PANEL,FR RDS 3
26	8A-MA3-080-010		KEY ASSY,GEQ 4M PM
27	8A-MA3-210-010		GUIDE,LED OPE
28	8A-MA3-071-010		KEY,TIMER
29	8A-MA3-066-010		KEY,FUN 5F
30	8A-MA3-083-010		KEY ASSY,DIR
31	8A-MA3-072-010		KEY,FREQ
32	8A-MA3-073-010		KEY,ENTER
33	8A-MA3-070-010		KEY,RDS
34	8A-MA3-084-010		KEY ASSY,FF
35	8A-MA3-069-010		KEY,KARAOKE
36	8A-MA3-057-010		WINDOW,TOP
37	8A-MA3-020-110		CABI,TOP
38	8A-MA3-101-010		REFLECTOR,POWER
39	8A-MA3-075-010		KEY,POWER
40	88-MA1-205-010		GUIDE,FL

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
41	8A-MA3-061-010		KEY,CD
42	8A-MA3-100-010		REFLECTOR,CD
43	8A-MA3-001-010		CABI,FR U 3
44	8A-MA3-062-010		KEY,MIC
45	8A-MA3-207-010		HLDR,PWB MAIN H
46	88-MA1-208-210		JOINT,CABI
47	8A-MA3-212-010		HLDR,PWB PT
48	8A-MA3-211-010		COVER,FAN
49	8A-NF3-223-010		HLDR,FAN
50	87-064-185-010		HLDR,WIRE
51	87-A91-711-010		FAN,3110GL-B 4W-B34-H
52	84-ZG1-245-210		CAP,OPTICAL
53	8A-MA3-013-010		CABI,REAR KSTNM
54	8A-MA3-214-010		W,3.5-6.5-1 W/ADH
55	8A-MA3-213-010		PLATE,TR
56	86-NF6-211-010		HLDR,IC T1.6
57	8A-MA3-205-110		HLDR,HT-SINK L
58	8A-MA3-206-010		HLDR,HT-SINK R
⚠ 59	87-099-811-010		PLUG ADPTR CONV(K)<K>
⚠ 60	87-A80-148-010		AC CORD ASSY,E BLK<EZ>
⚠ 60	87-A80-143-010		AC CORD ASSY,E BLK<K>
61	87-085-185-010		BUSHING, AC CORD (E)
62	87-MA3-062-010		FOOT, H17
63	8A-MA3-045-010		PANEL,SIDE L 3
64	8A-MA3-046-010		PANEL,SIDE R 3
A	87-078-060-010		BVIT3PB+3-10
B	87-591-095-410		TAPPING SCREW, QIT+3-8 (GLD)
C	87-NF4-224-010		S-SCREW,IT3B+3-8 CU
D	81-MK1-210-010		S-SCREW,VFT2+3-16
E	87-067-688-010		BVTT+3-6
F	87-067-975-010		S-SCREW,1T+4-8
G	87-067-703-010		TAPPING SCREW, BVT2+3-10
H	87-067-758-010		BVT2+3-12 W/O SLOT
I	87-067-581-010		S-SCREW,BVT2+3-15 W/O
J	87-067-579-010		TAPPING SCREW, BVT2+3-8
K	87-067-641-010		UTT2+3-8(W/O SLOT)BL

COLOR NAME TABLE

Basic color symbol	Color	Basic color symbol	Color	Basic color symbol	Color
B	Black	C	Cream	D	Orange
G	Green	H	Gray	L	Blue
LT	Transparent Blue	N	Gold	P	Pink
R	Red	S	Silver	ST	Titan Silver
T	Brown	V	Violet	W	White
WT	Transparent White	Y	Yellow	YT	Transparent Yellow
LM	Metallic Blue	LL	Light Blue	GT	Transparent Green
LD	Dark Blue	DT	Transparent Orange	GM	Metallic Green
YM	Metallic Yellow	DM	Metallic Orange	PT	Transparent Pink

TAPE MECHANISM EXPLODED VIEW 1 / 1


14
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42
PH(DECK 1)
RPH(DECK 2)
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(DECK 2)
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(DECK 1)
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HEAD 1 C.B(DECK 1)
HEAD 2 C.B(DECK 2)
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(DECK 1)
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(DECK 2)
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SOL 2
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59
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(DECK 1)
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38
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C
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53

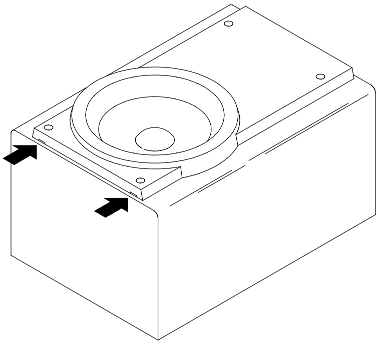
TAPE MECHANISM PARTS LIST 1 / 1

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	82-ZM3-301-519		CHAS ASSY,M2
2	82-ZM1-258-110		SPR-T,PINCH L
3	82-ZM1-341-110		LVR ASSY,PINCH L2
4	82-ZM1-333-010		PLATE,LINK 2
5	82-ZM1-266-11K		LVR,DIR
6	82-ZM1-214-010		SPR-T,DIR
7	82-ZM1-206-81K		CHAS,HEAD
8	82-ZM3-307-019		CUSH-G,DIA3.7-8-3.2
9	82-ZM1-269-219		SPR-T,BRG
10	82-ZM1-219-119		SPR-T,LINK
11	82-ZM1-210-119		GEAR,H T
12	82-ZM1-213-019		SPR-T,HEAD
13	82-ZM1-207-619		GUIDE,TAPE
14	86-ZM4-206-010		S-SCREW,AZIMUTH
15	82-ZM1-314-119		PLATE,HEAD
16	82-ZM1-208-119		HLDR,HEAD
17	82-ZM1-218-019		SPR-E,HB
18	82-ZM1-263-110		LVR,EJECT L (DECK 1)
18	82-ZM1-264-010		LVR,EJECT R (DECK 2)
19	82-ZM1-222-21K		LVR,PLAY
20	82-ZM1-217-319		REEL TABLE
21	82-ZM1-244-510		SPR-C,BT
22	82-ZM1-285-310		SPR-C,BT L
23	82-ZM1-257-019		SPR-T,CAS
24	82-ZM1-241-319		LVR,MC
25	82-ZM1-242-019		LVR,CAS
26	82-ZM1-243-019		LVR,STOP
27	82-ZM1-344-110		LVR ASSY,PINCH R2
28	82-ZM1-259-110		SPR-T,PINCH R
29	82-ZM1-240-11K		LVR,REC (DECK 2)
31	82-ZM1-255-319		SPR-E,LVR DIR
32	82-ZM3-305-01K		GEAR,CAM M2
33	82-ZM1-227-21K		LVR,TRIG
34	82-ZM3-306-11K		LVR,FR M2
35	82-ZM1-265-119		SPR-E,TRIG
36	82-ZM1-236-019		CAPSTAN N 2-41.5
37	82-ZM1-239-019		CAPSTAN N 2.2-41.7
38	82-ZM1-322-019		SPR-T,FR60
39	82-ZM1-220-219		GEAR,IDLER
40	82-ZM3-616-019		RING MAGNET 4
41	82-ZM1-216-31K		GEAR,REEL
42	87-A90-366-010		HEAD,PH YK50P-BF414 FPC
42	87-A90-367-010		HEAD,RPH YK56R-BF414 FPC
43	82-ZM1-225-21K		GEAR,FR
44	82-ZM1-226-019		GEAR,REW
45	82-ZM3-333-310		SLIP DISK ASSY 2
46	82-ZM1-338-010		BELT FR4
47	82-ZM1-349-110		FLY-WHL,R W(DECK 2)
47	82-ZM3-338-110		FLY-WHL,R3 W(DECK 1)
48	82-ZM1-348-010		FLY-WHL,L W(DECK 2)
48	82-ZM1-348-010		FLY-WHL,L W(DECK 1)
49	82-ZM3-329-210		BELT,SBU R2
50	82-ZM1-245-210		HLDR,IC
51	87-045-347-019		MOT,SHU2L 70(M1)
52	82-ZM3-221-010		PULLEY,MOT 2M
53	82-ZM1-288-019		SH,1.63-3.2-0.5 SLT
54	80-ZM6-243-019		SH,1.75-3.6-0.5 SLT
55	82-ZM3-335-210		PULLEY,COUPLER M3(DECK 1)
56	82-ZM3-337-010		BELT,SBU MOT 2
57	82-ZM3-339-010		SHAFT,COUPLER N3(DECK 1)
58	86-ZM1-206-010		BELT,MAIN L
59	82-ZM3-340-010		SH,BELT D2
A	85-ZM3-202-010		S-SCREW,TG
B	80-ZM6-207-019		V+1.6-7
C	82-ZM3-318-019		S-SCRW MOTOR M2
D	87-B10-043-010		W-P,0.99-4-0.25 SLT
E	82-ZM3-334-010		PW,2.16-6-0.4

SPEAKER DISASSEMBLY INSTRUCTIONS

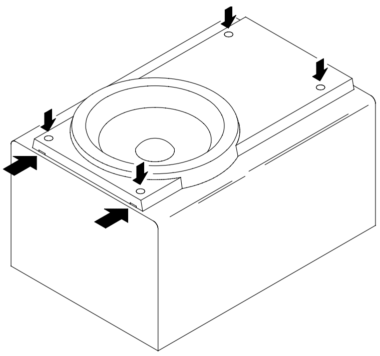
Type.1

Insert a flat-bladed screwdriver into the position indicated by the arrows and remove the panel. Remove the screws of each speaker unit and then remove the speaker units.



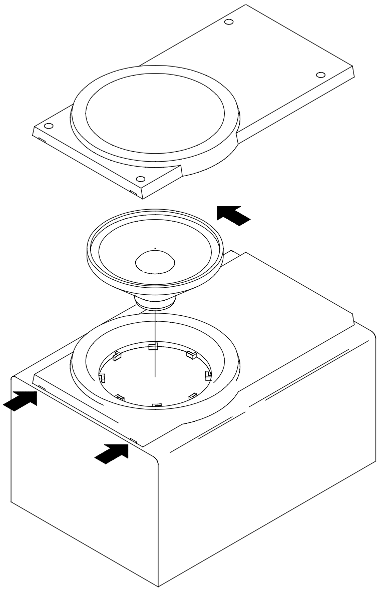
Type.2

Remove the grill frame and four pieces of rubber caps by pulling out with a flat-bladed screwdriver. Remove the screws from hole where installed rubber caps. Insert a flat-bladed screwdriver into the position indicated by the arrows and remove the panel. Remove the screws of each speaker unit and then remove the speaker units.

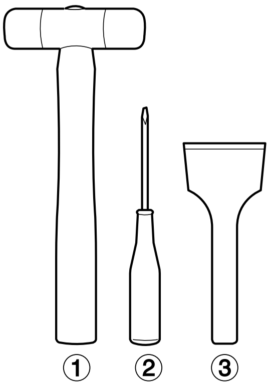


Type.3

Insert a flat-bladed screwdriver into the position indicated by the arrows and remove the panel. Turn the speaker unit to counter-clockwise direction while inserting a flat-bladed screwdriver into one of the hollows around speaker unit, and then remove the speaker unit. After replacing the speaker unit, install it turning to clockwise direction until "click" sound comes out.



Type.4



TOOLS

- ① Plastic head hammer
- ② (⊖) flat head screwdriver
- ③ Cut chisel

How to Remove the PANEL, FR

1. Insert the (⊖) flat head screwdriver tip into the gap between the PANEL, FR and the PANEL, SPKR. Tap the head of the (⊖) flat head screwdriver with the plastic hammer head, and create the clearance as shown in Fig-1.

2. Insert the cut chisel in the clearance, and tap the head of the cut chisel with plastic hammer as shown in Fig-2, to remove the PANEL, FR.

3. Place the speaker horizontally. Tap head of the cut chisel with plastic hammer as shown in Fig-3, and remove the PANEL, FR completely.

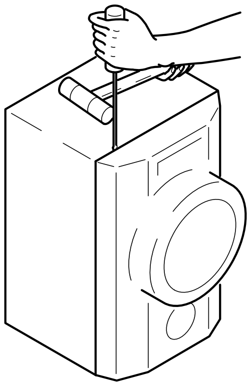


Fig-1

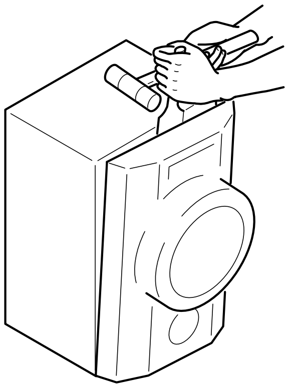


Fig-2

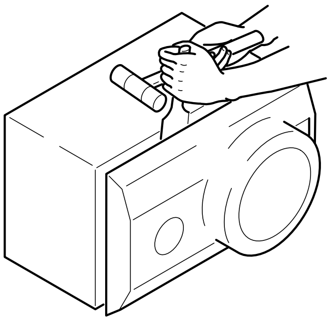


Fig-3

How to Attach the PANEL, FR

Attach the PANEL, FR to the PANEL, SPKR. Tap the four corners of the PANEL, FR with the plastic hammer to fit the PANEL, FR into the PANEL, SPKR completely.

SPEAKER PARTS LIST <SX-WZL700 (YSL)>

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	8A-MS3-001-010		PANEL,FR
2	8A-MS3-002-010		PANEL,TW
3	8A-MS3-003-010		PANEL,BA
4	8A-MS3-004-010		PLATE,NAME
5	8A-MS3-006-010		GRILLE,FRAME ASSY
6	8A-MS3-010-010		PROTECTOR
7	8A-MS3-013-010		PANEL,BA B
8	8A-MS3-603-010		SPKR,M 120
9	88-MS1-608-010		SPKR, CERAMIC
10	88-NS5-611-010		CORD,SPKR B/L
11	88-MS1-610-010		CORD,SPKR
12	8Z-MS1-601-010		SPKR, W200
13	8A-MS4-010-010		BADGE,AIWA

ACCESSORIES / PACKAGE LIST

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	8A-MA3-905-010		IB,K (E) M<K>
1	8A-MA3-906-010		IB,EZ (9L) M<EZ>
2	87-A90-118-010		ANT,WIRE FM (Z)
3	87-A90-030-010		ANT,LOOP AM-NC C
4	8Z-MA1-702-010		RC UNIT,ZAS12

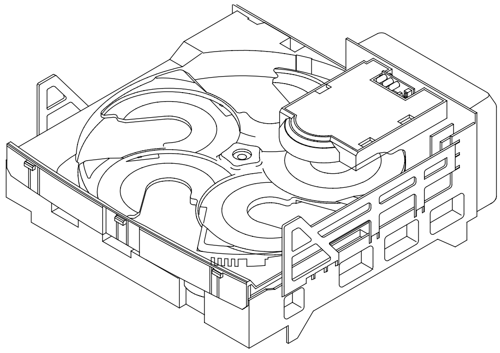
アイワ株式会社 〒110-8710 東京都台東区池之端1-2-11 ☎03（3827）3111（代表）
AIWA CO.,LTD. 2–11, IKENOHATA 1–CHOME, TAITO-KU, TOKYO 110, JAPAN TEL:03 (3827) 3111

9301978 9630472 0251431 Printed in Singapore

aiwa SERVICE

6ZG-1

English



SERVICE MANUAL

VIDEO CD MECHANISM

BASIC CD MECHANISM :3ZG-2 E2

TYPE
VZRNDM
VZRDM
YVZRNDM

aiwa

S/M Code No. 09-001-338-7N4

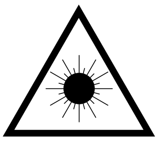
DATA

PROTECTION OF EYES FROM LASER BEAM DURING SERVICING

This set employs laser. Therefore, be sure to follow carefully the instructions below when servicing.

WARNING!

WHEN SERVICING, DO NOT APPROACH THE LASER EXIT WITH THE EYE TOO CLOSELY. IN CASE IT IS NECESSARY TO CONFIRM LASER BEAM EMISSION. BE SURE TO OBSERVE FROM A DISTANCE OF MORE THAN 30cm FROM THE SURFACE OF THE OBJECTIVE LENS ON THE OPTICAL PICK-UP BLOCK.



- Caution: Invisible laser radiation when open and interlocks defeated avoid exposure to beam.
- Advarsel: Usynling laserståling ved åbning, når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling.

VAROITUS!

Laiteen Käyttäminen muulla kuin tässä käyttöohjeessa mainitulla tavalla saattaa altistaa käyt-täjän turvallisuusluokan 1 ylittävälle näkymättömälle lasersäteilylle.

VARNING!

Om apparaten används på annat sätt än vad som specificeras i denna bruksanvising, kan användaren utsättas för osynling laserstrålning, som överskrider gränsen för laserklass 1.

CAUTION

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

ATTENTION

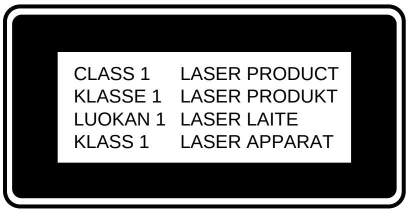
L'utilisation de commandes, réglages ou procédures autres que ceux spécifiés peut entraîner une dangereuse exposition aux radiations.

ADVARSEL!

Usynlig laserståling ved åbning, når sikkerhedsafbrydereer ude af funktion. Undgå udsættelse for stråling.

This Compact Disc player is classified as a CLASS 1 LASER product.

The CLASS 1 LASER PRODUCT label is located on the rear exterior.



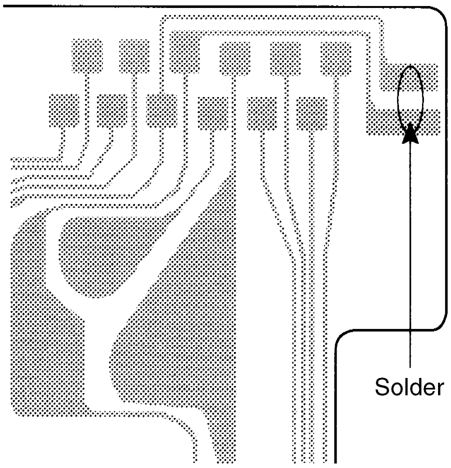
CLASS 1	LASER PRODUCT
KLASSE 1	LASER PRODUKT
LUOKAN 1	LASER LAITE
KLASS 1	LASER APPARAT

Precaution to replace Optical block (KSS-213F)

Body or clothes electrostatic potential could ruin laser diode in the optical block. Be sure ground body and workbench, and use care the clothes do not touch the diode.

1) After the connection, remove solder shown in the right figure.

PICK-UP Assy P.C.B



DISASSEMBLY INSTRUCTIONS

1. How to replace PICK UP.

1) Open the TRAY.
   Push the stopper to arrow direction and release half of the SHAFT SLED.
2) Turn GEAR MAIN CAM to the counterclockwise (arrow “a”) direction, and lift up CD mechanism. (Fig-1)
3) Remove SHAFT SLED.
4) CD mechanism in down position, replace PICK UP.
5) Lift up CD mechanism (Fig-1), and Reassemble the SHAFT SLED.

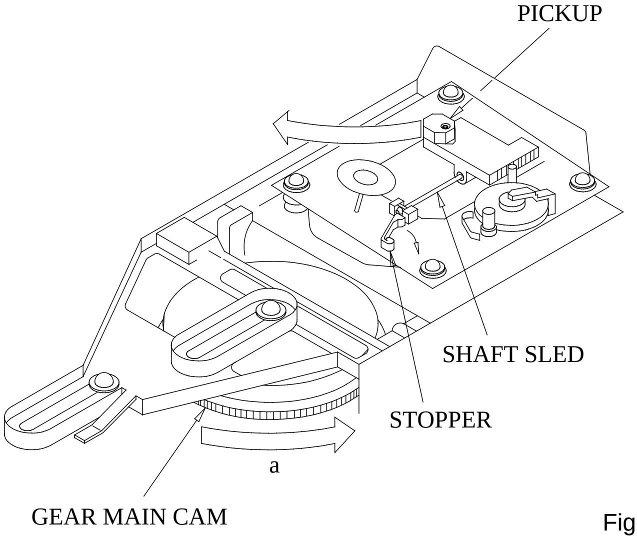

PICKUP
SHAFT SLED
STOPPER
a
GEAR MAIN CAM

Fig-1

2. How to remove the 5CD CHANGER BLOCK (Fig-2)

1) Remove the two FFC of the CD circuit board, and remove the five SCREWS.
2) Lift 5 CD CHANGER BLOCK from behind, and remove it. (5CD CHANGER BLOCK can be removed even if PANEL TRAY is not removed.)

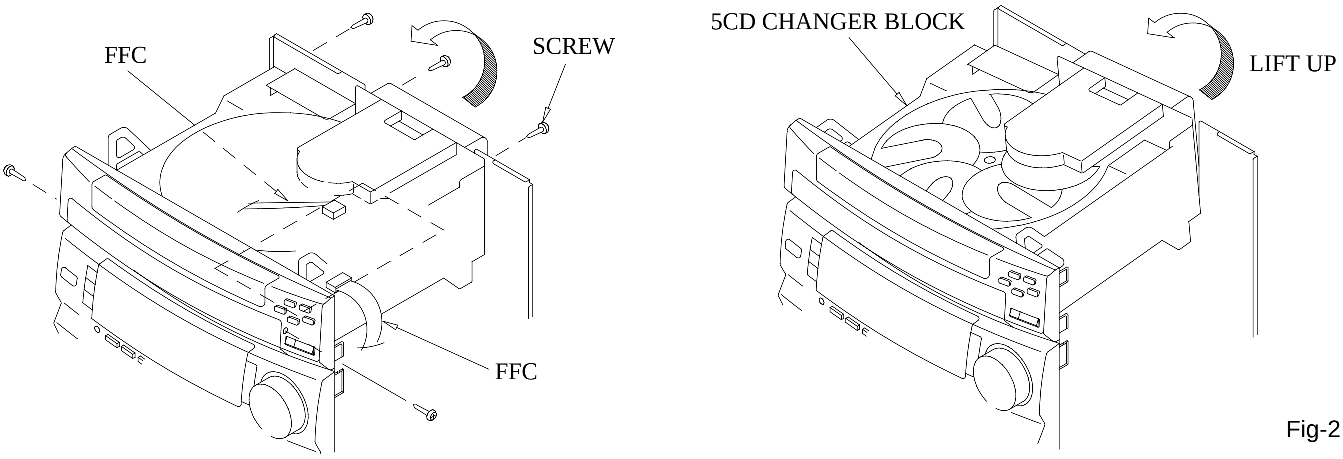

FFC
SCREW
FFC
5CD CHANGER BLOCK
LIFT UP

Fig-2

3. The disassemble and reassemble the TRAY

3-1. Disassembling procedure.

1) Push the PLATE GEAR’S Boss at the bottom part of CHAS MECHA strongly to the outside (arrow “b” direction). (Fig-3)
   (Confirm that TRAY appears a little in the front.)
2) Draw TRAY to the open position.
3) Remove FFC, and push the two LEVERS at both side of the CHAS MECH to remove TRAY. (Fig-4)

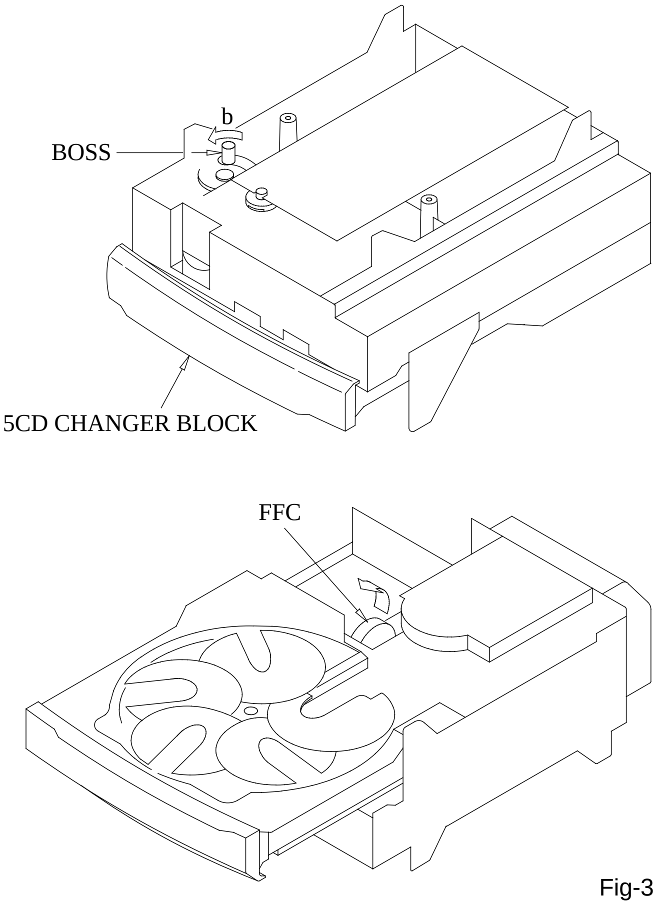


Fig-3

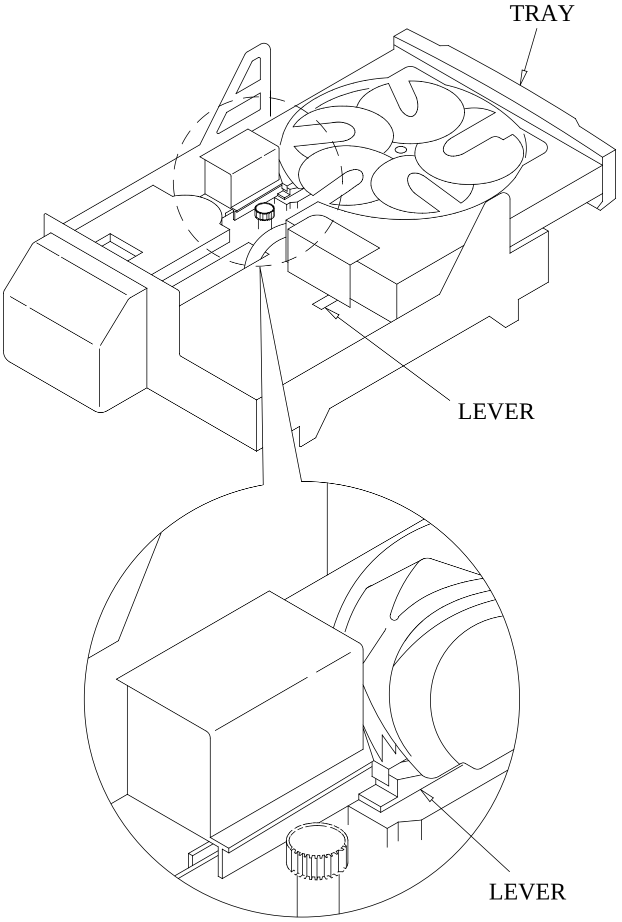


Fig-4

3-2. Reassembling procedure.

1) Confirm that LEVER TRAY is at the most right position and check for the CD Mechanism to be in the down position. (Fig-5)
2) Push in the TRAY along the rail of the CHAS MECHA.
3) After TRAY is half closed and FFC is put in, it can enter by force until the end of TRAY closed. (Fig-6)

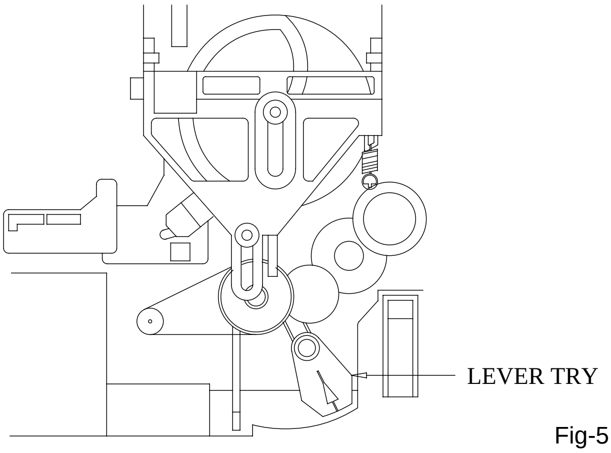


Fig-5

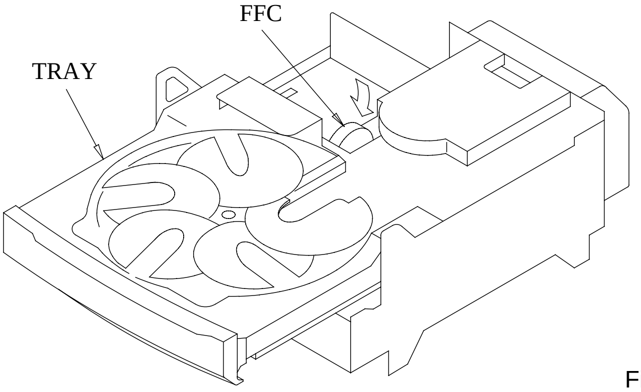


Fig-6

4. How to reassemble the TURN TABLE. (Fig-7)

1) Push LEVER TT in the direction of “C”, and put in the TURN TABLE 5CD. (Fig-7)
   After reassembly, one of the TURN TABLE DISC TRAY (can be either one of the five disc trays) must be aligned with TURN TABLE 5CD. (Fig-8)
   That is, having no gap difference between the TURN TABLE 5CD and the TRAY 5CD.

* When reassembling the TURN TABLE 5CD, it is acceptable facing any CD number (1-5).

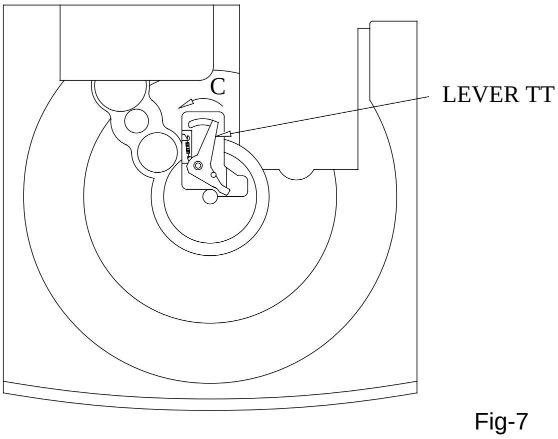


Fig-7

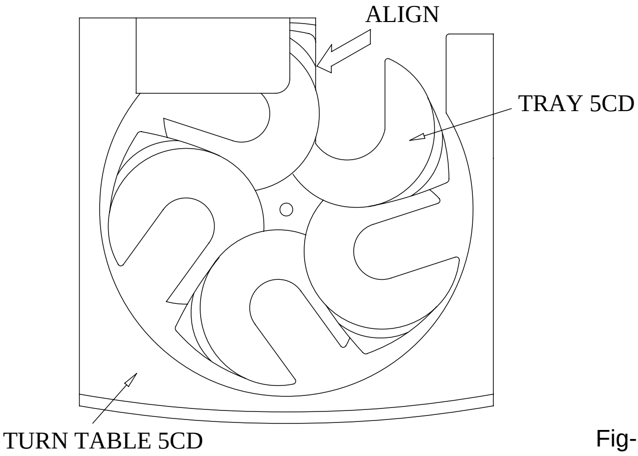


Fig-8

ELECTRICAL MAIN PARTS LIST

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
IC			
	87-A21-381-040		C-IC,LA9235M
	87-A21-557-010		C-IC,LC78635E
	8Z-ZJP-602-010		C-IC,UPD78016FGC-574
	87-017-760-080		IC,M51943BML
	87-A20-602-040		C-IC,M5291FP
	87-A20-925-040		C-IC,BA05FP
	87-A20-905-040		C-IC,BA033FP
	87-A21-513-040		C-IC,BA6998FP
	87-A20-920-010		C-IC,CL680-D1
	87-A20-975-040		C-IC,SN74LV74APW
	87-A20-921-040		C-IC,SN74LVU04APW
	87-A20-962-040		C-IC,MSM54V16258B/BSL
	84-ZG1-695-040		C-IC,LH5V2RN1
	87-A20-918-040		C-IC,SM5878AM
	87-001-982-010		IC,TA7291S
	87-A20-974-040		C-IC,LC74781M-9017
TRANSISTOR			
	87-026-609-080		TR,KTA1266GR
	87-A30-076-080		C-TR,2SC3052F
	89-327-125-080		CHIP TR,2SC2712GR
	87-026-237-080		CHIP-TR,DTC124XK
	87-026-231-080		CHIP-TRANSISTER,DTA124XK
	87-A30-117-010		TR,2SA1357
	89-421-722-380		TR,2SD2172V/W
	89-320-011-080		TR,2SC2001 (15W)
	87-026-223-080		TR,DTC143TK
	87-A30-031-010		P-TR,PT380F
	87-026-580-080		C-TR,DTA123JK
	87-026-470-080		TR,HN1C03F (0.3W)
	89-111-625-080		TR,2SA1162 (0.15W)
	87-026-608-080		C-TR,DTC 123 JK<VZRDM>
DIODE			
	87-A40-003-080		ZENER,MTZJ4.3A
	87-017-024-040		C-DIODE,DA204K
	87-A40-180-040		C-DIODE,SB07-015C
	87-020-465-080		DIODE,1SS133 (110MA)
	87-020-027-080		CHIP-DIODE 1SS184
VCD C.B			
C1	87-A10-222-040		CAP,AS 22-10 OS
C2	87-010-196-080		CHIP CAPACITOR,0.1-25
C3	87-010-260-040		CAP,E 47-25 SME
C4	87-010-374-040		CAP,AS 22-10 OS
C5	87-010-197-080		CAP, CHIP 0.01 DM
C6	87-010-405-040		CAP,E 10-50
C7	87-010-263-040		CAP,E 100-10
C8	87-010-178-080		CHIP CAP 1000P
C10	87-010-546-040		CAP,E 0.33-50
C11	87-010-401-040		CAP,E 1-50 SME
C13	87-010-321-080		C-CAP,S 82P (J)
C15	87-010-197-080		CAP, CHIP 0.01 DM
C16	87-010-260-040		CAP,E 47-25 SME
C65	87-010-196-080		CHIP CAPACITOR,0.1-25
C101	87-010-992-080		C-CAP,S 0.047-25 B
C102	87-010-401-040		CAP,E 1-50 SME
C103	87-010-196-080		CHIP CAPACITOR,0.1-25
C104	87-010-196-080		CHIP CAPACITOR,0.1-25
C105	87-010-260-040		CAP,E 47-25 SME
C106	87-010-322-080		C-CAP,S 100P-50 CH
C107	87-010-196-080		CHIP CAPACITOR,0.1-25
C109	87-010-992-080		C-CAP,S 0.047-25 B
C110	87-010-322-080		C-CAP,S 100P-50 CH
C111	87-010-260-040		CAP,E 47-25 SME
C112	87-010-197-080		CAP, CHIP 0.01 DM
C114	87-010-260-040		CAP,E 47-25 SME
C115	87-010-197-080		CAP, CHIP 0.01 DM
C116	87-010-260-040		CAP,E 47-25 SME
C117	87-010-197-080		CAP, CHIP 0.01 DM
C118	87-010-263-040		CAP,E 100-10
C119	87-A11-567-080		C-CAP,S 0.01-50 K B
C123	87-010-197-080		CAP, CHIP 0.01 DM
C124	87-010-401-040		CAP,E 1-50 SME
C126	87-010-196-080		CHIP CAPACITOR,0.1-25
C130	87-010-196-080		CHIP CAPACITOR,0.1-25
C132	87-010-405-040		CAP,E 10-50
C133	87-010-314-080		C-CAP,S 22P-50V
C135	87-010-197-080		CAP, CHIP 0.01 DM
C140	87-010-322-080		C-CAP,S 100P-50 CH
C194	87-010-197-080		CAP, CHIP 0.01 DM
C195	87-010-260-040		CAP,E 47-25 SME
C201	87-016-669-080		C-CAP,S 0.1-25 K B
C213	87-010-190-080		S CHIP F 0.01
C214	87-010-196-080		CHIP CAPACITOR,0.1-25
C216	87-010-322-080		C-CAP,S 100P-50 CH
C217	87-010-322-080		C-CAP,S 100P-50 CH
C218	87-010-322-080		C-CAP,S 100P-50 CH
C219	87-010-322-080		C-CAP,S 100P-50 CH
C220	87-010-263-040		CAP,E 100-10
C221	87-010-190-080		S CHIP F 0.01
C242	87-010-318-080		C-CAP,S 47P-50 CH
C301	87-016-251-040		CAP,E 220-16 SMG
C302	87-012-140-080		CAP 470P
C303	87-010-178-080		CHIP CAP 1000P
C304	87-010-384-040		CAP,E 100-25 SME
C305	87-010-982-040		CAP,E 33-25 GAS
C306	87-010-112-040		CAP,E 100-16
C307	87-010-196-080		CHIP CAPACITOR,0.1-25
C308	87-010-263-040		CAP,E 100-10
C309	87-010-196-080		CHIP CAPACITOR,0.1-25
C310	87-010-263-040		CAP,E 100-10
C311	87-010-196-080		CHIP CAPACITOR,0.1-25
C312	87-010-178-080		CHIP CAP 1000P
C340	87-010-112-040		CAP,E 100-16
C341	87-010-196-080		CHIP CAPACITOR,0.1-25
C351	87-010-197-080		CAP, CHIP 0.01 DM
C352	87-016-251-040		CAP,E 220-16 SMG
C353	87-010-196-080		CHIP CAPACITOR,0.1-25
C361	87-010-403-040		CAP,E 3.3-50 SME
C362	87-010-403-040		CAP,E 3.3-50 SME
C404	87-010-196-080		CHIP CAPACITOR,0.1-25
C406	87-010-196-080		CHIP CAPACITOR,0.1-25
C407	87-010-196-080		CHIP CAPACITOR,0.1-25
C410	87-010-196-080		CHIP CAPACITOR,0.1-25
C420	87-010-196-080		CHIP CAPACITOR,0.1-25
C447	87-010-263-040		CAP,E 100-10
C462	87-010-196-080		CHIP CAPACITOR,0.1-25
C464	87-010-221-080		CAP, ELECT 470-10V
C501	87-010-197-080		CAP, CHIP 0.01 DM
C502	87-010-197-080		CAP, CHIP 0.01 DM
C503	87-010-197-080		CAP, CHIP 0.01 DM
C509	87-016-669-080		C-CAP,S 0.1-25 K B
C511	87-010-196-080		CHIP CAPACITOR,0.1-25
C512	87-010-197-080		CAP, CHIP 0.01 DM
C513	87-010-197-080		CAP, CHIP 0.01 DM
C514	87-010-197-080		CAP, CHIP 0.01 DM
C518	87-010-322-080		C-CAP,S 100P-50 CH
C519	87-012-145-080		CAP, CHIP S 270P CH
C520	87-012-157-080		C-CAP,S 330P-50 CH
C521	87-012-154-080		C-CAP,S 150P-50 CH
C523	87-010-197-080		CAP, CHIP 0.01 DM
C524	87-010-197-080		CAP, CHIP 0.01 DM
C525	87-010-197-080		CAP, CHIP 0.01 DM
C526	87-010-197-080		CAP, CHIP 0.01 DM
C527	87-010-197-080		CAP, CHIP 0.01 DM

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
C528	87-010-197-080		CAP, CHIP 0.01 DM
C529	87-010-197-080		CAP, CHIP 0.01 DM
C530	87-010-197-080		CAP, CHIP 0.01 DM
C531	87-010-197-080		CAP, CHIP 0.01 DM
C532	87-010-374-040		CAP,E 47-10
C533	87-010-197-080		CAP, CHIP 0.01 DM
C534	87-010-263-040		CAP,E 100-10
C535	87-010-197-080		CAP, CHIP 0.01 DM
C536	87-010-078-040		CAP,E 47-6.3 5L
C537	87-010-190-080		S CHIP F 0.01
C538	87-010-196-080		CHIP CAPACITOR,0.1-25
C539	87-010-196-080		CHIP CAPACITOR,0.1-25
C540	87-010-078-040		CAP,E 47-6.3 5L
C541	87-010-197-080		CAP, CHIP 0.01 DM
C544	87-010-197-080		CAP, CHIP 0.01 DM
C546	87-010-197-080		CAP, CHIP 0.01 DM
C548	87-010-154-080		CAP CHIP 10P
C553	87-010-154-080		CAP CHIP 10P
C555	87-010-197-080		CAP, CHIP 0.01 DM
C560	87-010-196-080		CHIP CAPACITOR,0.1-25
C561	87-010-263-040		CAP,E 100-10
C563	87-010-263-040		CAP,E 100-10
C604	87-016-669-080		C-CAP,S 0.1-25 K B
C605	87-010-197-080		CAP, CHIP 0.01 DM
C606	87-010-197-080		CAP, CHIP 0.01 DM
C607	87-010-313-080		CAP, CHIP 18P
C608	87-010-313-080		CAP, CHIP 18P
C609	87-010-178-080		CHIP CAP 1000P
C610	87-010-178-080		CHIP CAP 1000P
C611	87-010-178-080		CHIP CAP 1000P
C612	87-010-178-080		CHIP CAP 1000P
C613	87-010-403-040		CAP,E 3.3-50 SME
C614	87-010-403-040		CAP,E 3.3-50 SME
C615	87-010-318-080		C-CAP,S 47P-50 CH
C616	87-010-318-080		C-CAP,S 47P-50 CH
C617	87-010-197-080		CAP, CHIP 0.01 DM
C618	87-010-197-080		CAP, CHIP 0.01 DM
C619	87-010-112-040		CAP,E 100-16
C722	87-010-371-080		CAP, ELECT 470-6.3V
C749	87-010-401-040		CAP,E 1-50 SME
C751	87-012-153-080		C-CAP,S 120P-50 CH
C752	87-016-526-080		C-CAP,S 0.47-16 BK
C754	87-010-197-080		CAP, CHIP 0.01 DM
C756	87-010-197-080		CAP, CHIP 0.01 DM
C757	87-A11-167-080		C-CAP,S 27P-50 F CH
C758	87-A11-167-080		C-CAP,S 27P-50 F CH
CN3	87-A60-133-010		CONN,8P V FE
CN201	86-ZG1-620-010		CONN ASSY,2P VIDEO-SW
CN202	87-A60-154-010		CONN,6P H FE
CN231	87-A60-162-010		CONN,14P H FE
CON1	87-A60-424-010		CONN,16P V TOC-B
CON2	87-A60-623-010		CONN,6P V 2MM JMT
FB191	87-008-372-080		FILTER, EMI BL 01RN1
FC1	86-ZG1-605-010		CABLE,FFC 16P
FC2	86-ZG1-609-010		CONN ASSY,6P
FC3	86-ZG1-667-010		F-CABLE,8P 1.25 175MM BLACK
J701	87-009-502-010		JACK,PIN 1P Y EARTH
L301	87-A50-095-010		COIL,68UH RCR875D
L302	87-005-426-080		COIL,3.3UH K FLR50
L303	87-005-426-080		COIL,3.3UH K FLR50
L401	87-003-102-080		COIL, 10UH
L502	87-005-204-080		COIL,47UH
L503	87-005-189-080		COIL 2.7UH
L504	87-005-187-080		COIL,1.8UH
L505	87-005-204-080		COIL,47UH
L506	87-005-204-080		COIL,47UH
L507	87-005-204-080		COIL,47UH
L708	87-005-817-080		C-COIL, 33UH J FLC32
LED191	87-A40-558-010		LED,SLZ-8128A-01-A
M351	87-045-305-010		MOTOR, RF-500TB DC-5V (2MA)

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
⚠PR350	87-A90-246-080		PROTECTOR,0.25A 60 4
R350	88-130-220-080		RES,22-1/4 W J
R507	87-A00-408-080		C-RES,S 2K-1/10W D
S353	87-036-109-010		PUSH SWITCH
SW351	87-036-109-010		PUSH SWITCH
SW352	87-036-109-010		PUSH SWITCH
X501	87-A70-125-080		VIB,XTAL 27MHZ 50PPM
X601	87-030-270-080		VIB,XTAL 16.9344MHZ

LED C.B<VZRDM>

LED901	87-017-733-080		LED,SEL1250SM<VZRDM>
LED902	87-017-350-080		LED,SEL1550CM<VZRDM>
LED903	87-017-733-080		LED,SEL1250SM<VZRDM>

T-T C.B

C411	87-A11-148-080		CAP,TC U 0.1-50 Z F
CON8	87-A60-156-010		CONN,8P H FE
LED411	87-070-288-010		LED,GL380
M401	87-A90-036-010		MOT ASSY,RF-300CA-11
PS401	87-A90-156-010		SNSR,SG-240
S401	87-036-109-010		PUSH SWITCH

VIDEO SW C.B

CON801	87-A60-109-010		CONN,2P V S2M-2W
SW801	87-A90-238-010		SW,SL 1-1-3 9L

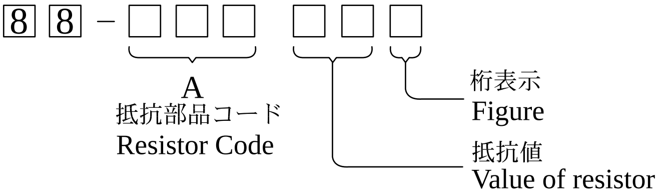
CD MOTOR C.B

M21	87-045-356-010		MOT,RF-310TA 30
PIN3	87-A60-670-010		CONN,6P H 2MM JMT
SW1	87-A90-042-010		SW,LEAF MSW-17310MVP0

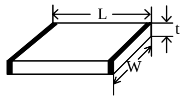
- Regarding connectors, they are not stocked as they are not the initial order items.
  The connectors are available after they are supplied from connector manufacturers upon the order is received.

○チップ抵抗部品コード／CHIP RESISTOR PART CODE

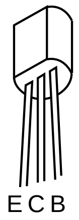
チップ抵抗部品コードの成り立ち
Chip Resistor Part Coding


8 8 − □□□ □□ □
A
抵抗部品コード
Resistor Code
桁表示
Figure
抵抗値
Value of resistor

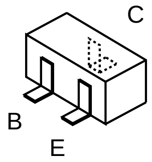
チップ抵抗
Chip resistor

容量 Wattage	種類 Type	許容誤差 Tolerance	記号 Symbol	寸法／Dimensions (mm)				抵抗コード : A Resistor Code : A
				外形／Form	L	W	t	
1/16W	1005	± 5%	CJ		1.0	0.5	0.35	104
1/16W	1608	± 5%	CJ		1.6	0.8	0.45	108
1/10W	2125	± 5%	CJ		2	1.25	0.45	118
1/8W	3216	± 5%	CJ		3.2	1.6	0.55	128

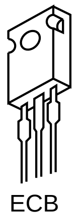
TRANSISTOR ILLUSTRATION



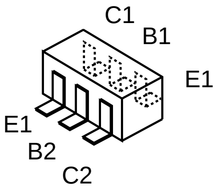
2SC2001
2SD2172
KTA1266



2SA1162
2SC2712
DTA123JK
DTA124XK
DTC124XK
DTC143TK
2SC3052F
DTC123JK

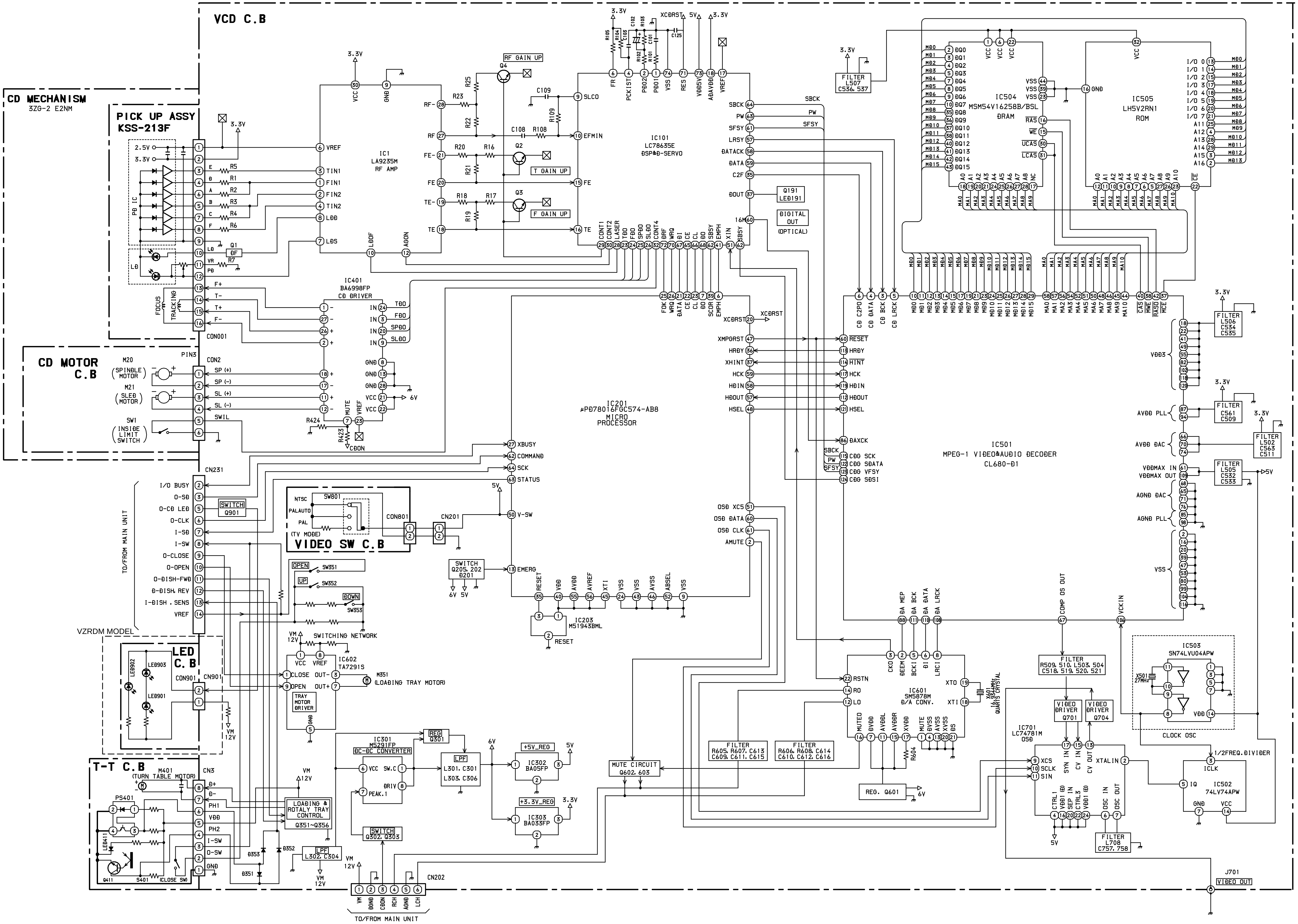


2SA1357

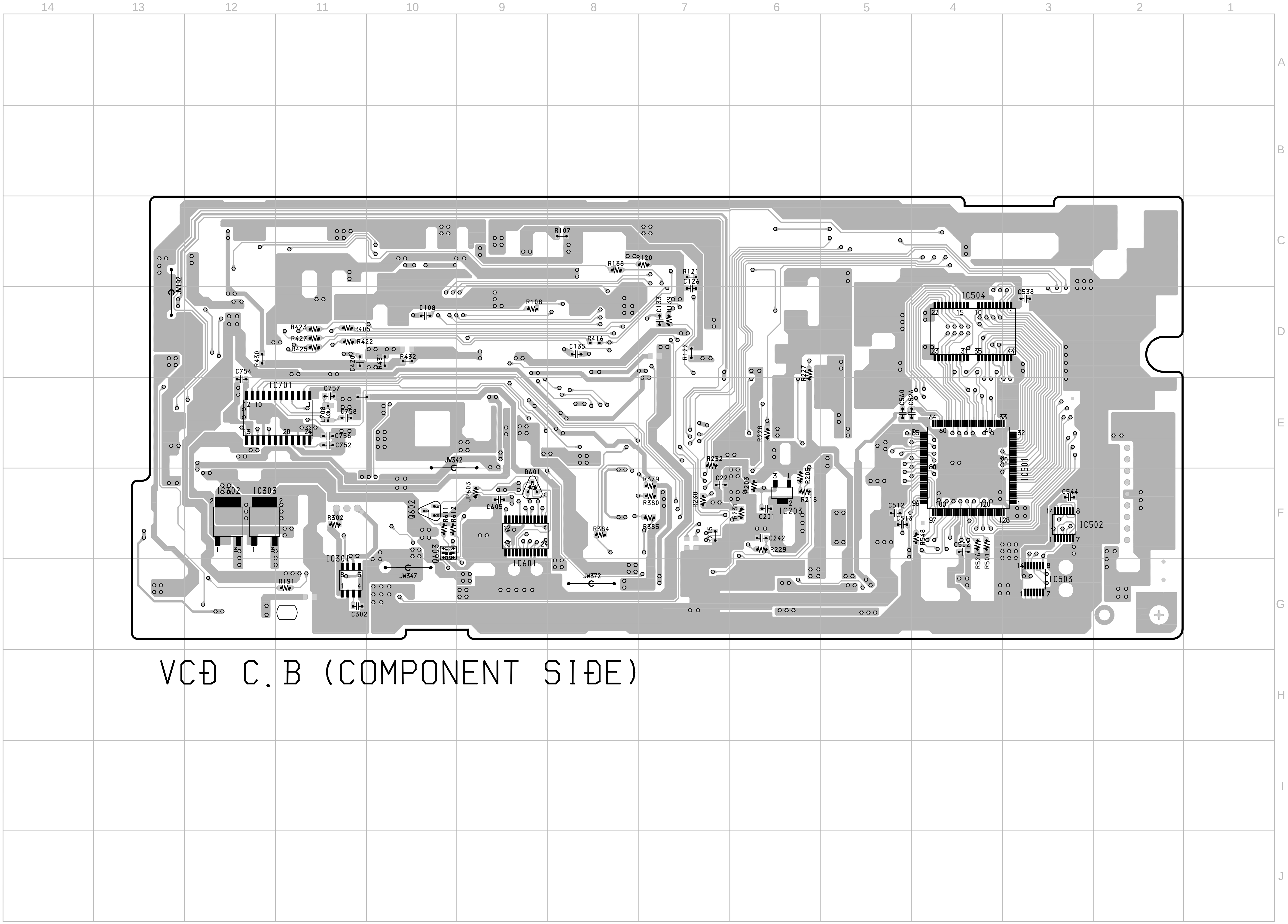

C1
B1
E1
E1
B2
C2

HN1C03F

BLOCK DIAGRAM


VCD C.B
CD MECHANISM
3ZG-2 E2NM
PICK UP ASSY
KSS-213F
PD IC
CON001
CD MOTOR C.B
M20 (SPINDLE MOTOR)
M21 (SLED MOTOR)
SW1 (INSIDE LIMIT SWITCH)
CON2
IC1
LA9235M
RF AMP
IC401
BA6998FP
CD DRIVER
Q1
Q2
Q3
Q4
RF GAIN UP
T GAIN UP
F GAIN UP
IC101
LC78635E
DSP&D-SERVO
Q191
LED191
DIGITAL OUT (OPTICAL)
IC201
μPD78016FGC574-AB8
MICRO PROCESSOR
IC203
M51943BML
RESET
IC504
MSM54V16258B/BSL
DRAM
IC505
LH5V2RN1
ROM
FILTER L507 C536, 537
IC501
MPEG-1 VIDEO&AUDIO DECODER
CL680-01
FILTER L506 C534 C535
FILTER L561 C509
FILTER L502 C563 C511
FILTER L505 C532 C533
IC601
SM5878M
D/A CONV.
X601 16.934MHz QUARTS CRYSTAL
FILTER R605, R607, C613 C609, C611, C615
FILTER R606, R608, C614 C610, C612, C616
REG. Q601
MUTE CIRCUIT Q602, 603
FILTER R509, 510, L503, 504 C518, 519, 520, 521
VIDEO DRIVER Q701
VIDEO DRIVER Q704
IC701
LC74781M
OSD
FILTER L708 C757, 758
IC503
SN74LVU04APW
X501 27MHz
CLOCK OSC
1/2FREQ. DIVIDER
IC502
74LV74APW
J701
VIDEO OUT
CN231
TO/FROM MAIN UNIT
I/O BUSY
O-SD
O-CD LED
O-CLK
I-SD
I-SW
O-CLOSE
O-OPEN
O-DISH-FWD
D-DISH REV
I-DISH . SENS
VREF
SWITCH Q901
SW801
NTSC
PALAUTO
PAL
(TV MODE)
VIDEO SW C.B
CON801
CN201
SWITCH Q205, 202 D201
OPEN SW351
UP SW352
DOWN SW353
SWITCHING NETWORK
IC602
TA7291S
M351 (LOADING TRAY MOTOR)
TRAY MOTOR DRIVER
VZRDM MODEL
LED C.B
LED902
LED903
LED901
CON901
CN901
T-T C.B
M401 (TURN TABLE MOTOR)
PS401
LED411
Q411
S401 (CLOSE SW)
CN3
LOADING & ROTALY TRAY CONTROL Q351~Q356
D351
D352
D353
IC301
M5291FP
DC-DC CONVERTER
REG Q301
LPF L301, C301 L303, C306
SWITCH Q302, Q303
LPF L302, C304
+5V_REG
IC302
BA05FP
+3.3V_REG
IC303
BA033FP
CN202
VM
DGND
CDON
RCH
AGND
LCH
TO/FROM MAIN UNIT

WIRING-1 (VCD: COMPONENT SIDE)



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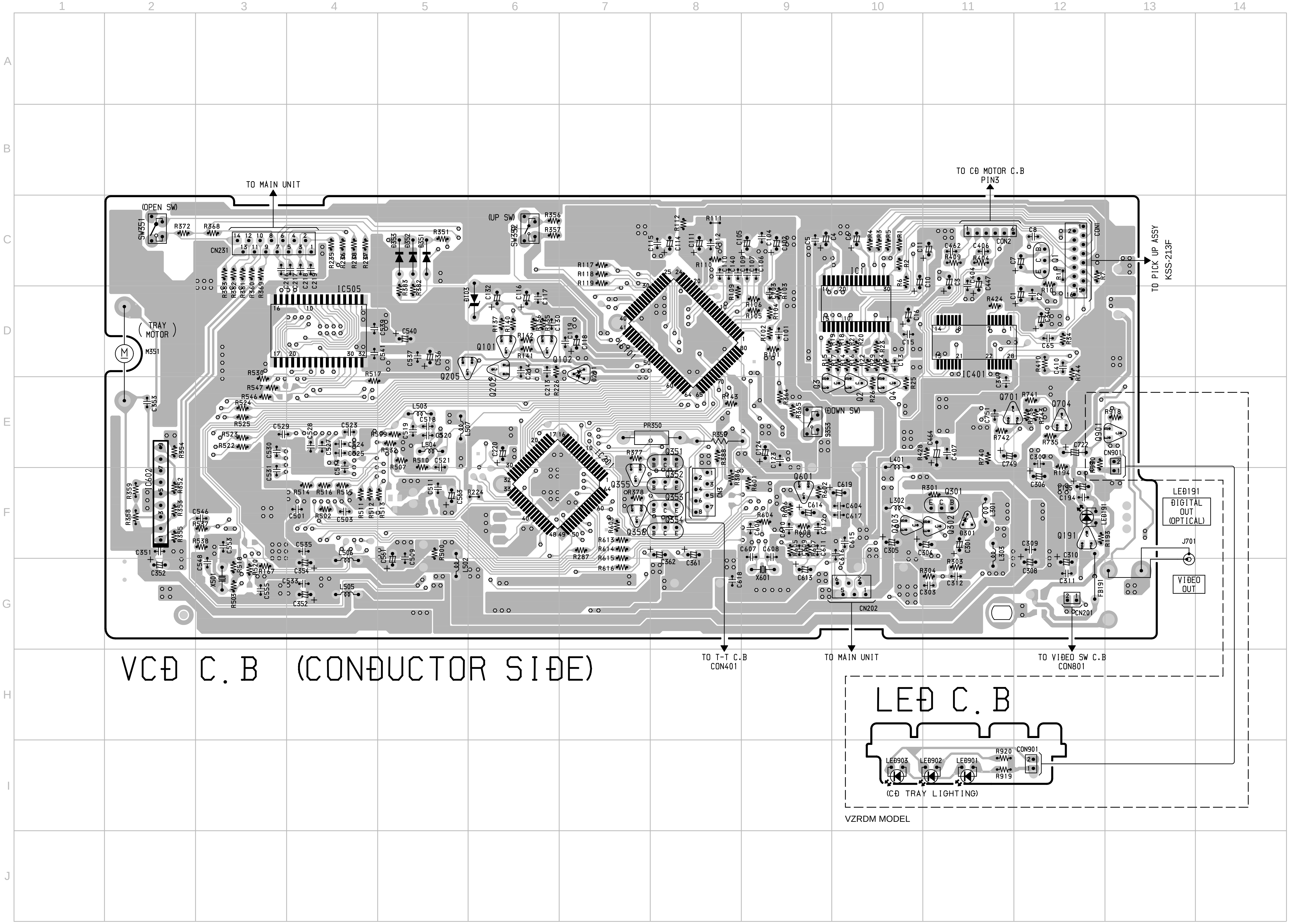
R107
R138
R120
R121
C126
IC504
C538
JW192
C108
R108
C133
R139
R423
R405
R427
R422
R425
R430
C420
R431
R432
R416
C135
R122
R227
C754
IC701
C757
C758
L708
C756
C752
C560
C526
R228
IC501
JW342
Q601
R379
R380
R385
R384
R232
C221
R203
R205
R218
R230
IC203
C201
R231
R215
C242
R229
IC602
IC303
JR603
C605
Q602
R611
R612
Q603
IC601
R302
IC301
JW347
JW372
R191
C302
C512
C513
R548
C502
R526
R501
C544
IC502
IC503
VCD C.B (COMPONENT SIDE)

WIRING-2 (VCD: CONDUCTOR SIDE)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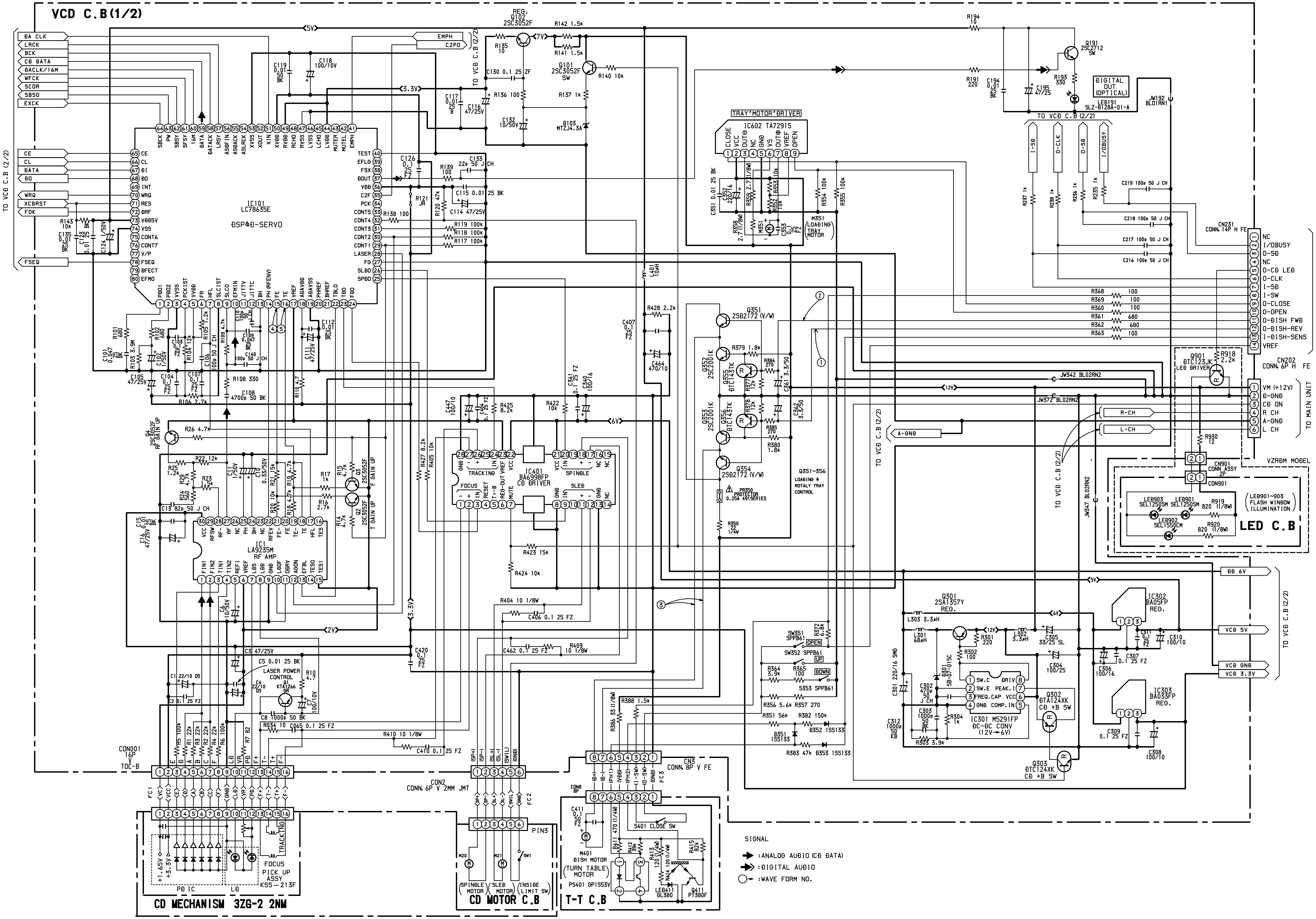
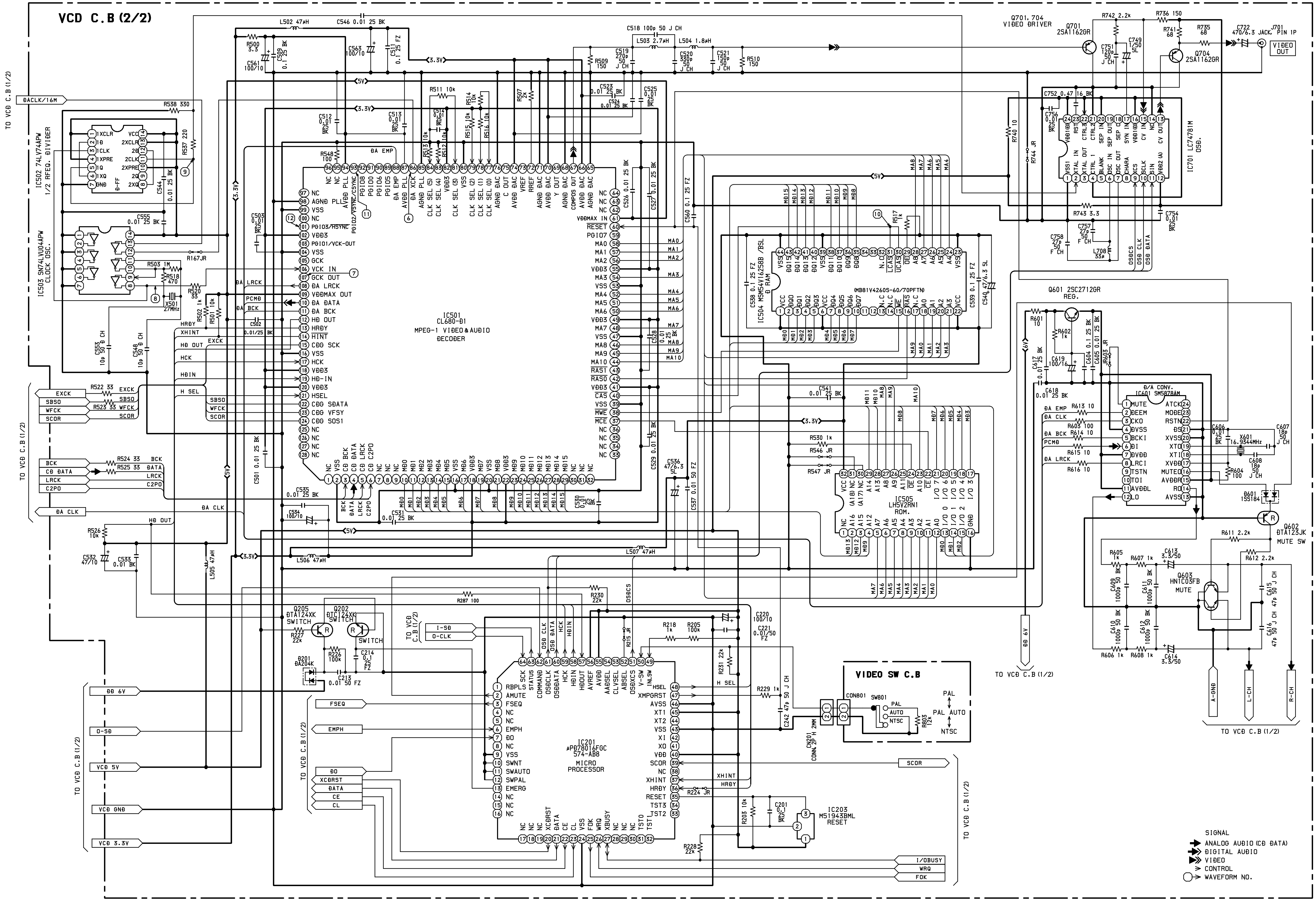
TO MAIN UNIT
TO CD MOTOR C.B
PIN3
TO PICK UP ASSY
KSS-213F
(OPEN SW)
SW351
(UP SW)
SW352
(DOWN SW)
SW353
TRAY
MOTOR
M351
IC505
IC602
IC601
IC201
IC1
IC401
CN231
CON1
CON2
CN3
CN202
CN201
CN901
Q1
Q101
Q102
Q201
Q202
Q205
Q301
Q302
Q303
Q351
Q352
Q353
Q354
Q355
Q358
Q601
Q701
Q704
Q901
Q191
LED191
DIGITAL
OUT
(OPTICAL)
J701
VIDEO
OUT
PR350
X501
X601
FB191
TO T-T C.B
CON401
TO MAIN UNIT
TO VIDEO SW C.B
CON801
VCD C.B (CONDUCTOR SIDE)
LED C.B
LED903
LED902
LED901
R920
R919
CON901
(CD TRAY LIGHTING)
VZRDM MODEL

SCHEMATIC DIAGRAM-1 (VCD: 1/2)

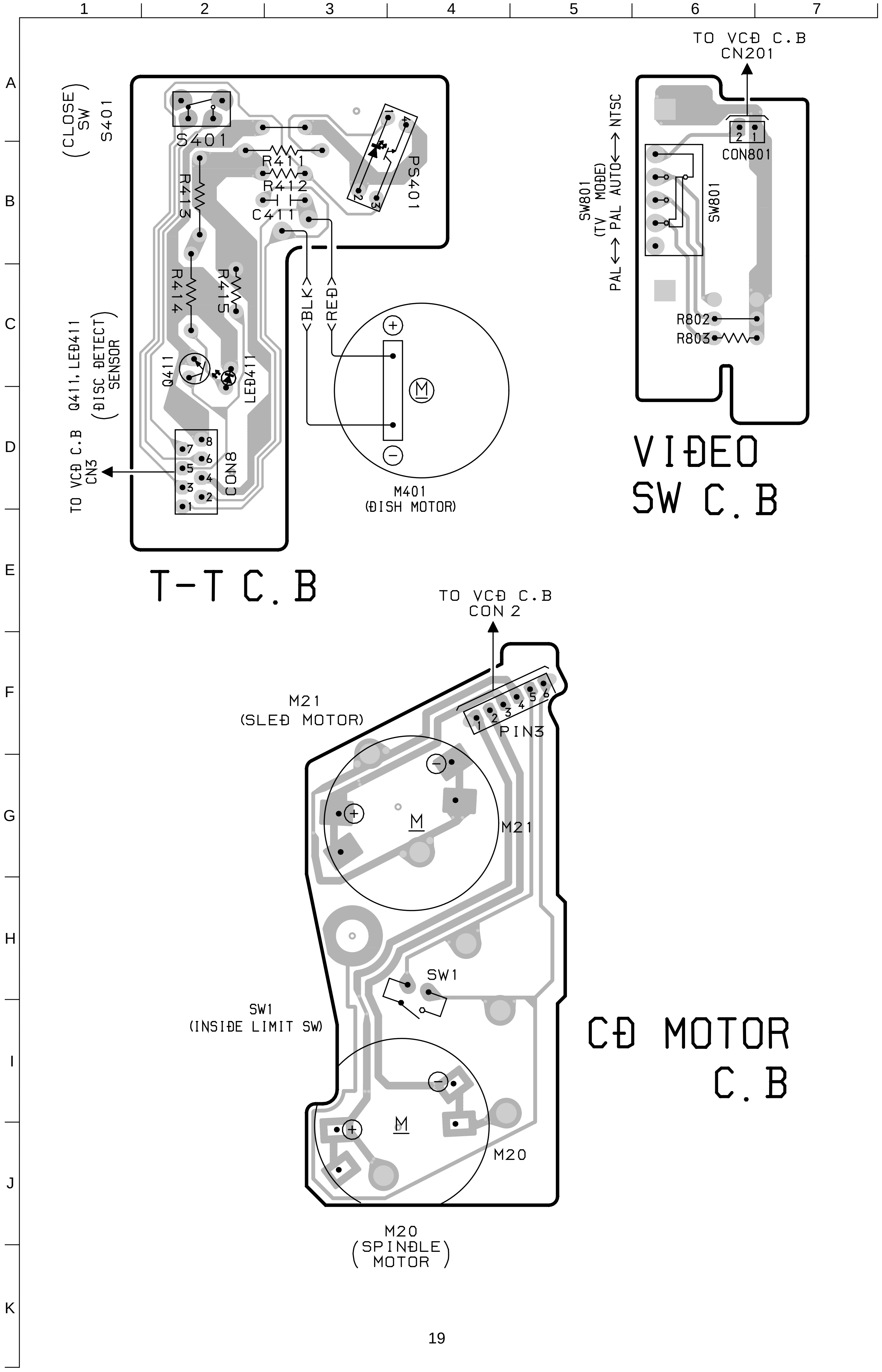

VCD C.B(1/2)
TO VCD C.B (2/2)
IC101 LC78635E
DSP&D-SERVO
IC1 LA9235M
RF AMP
IC401 BA6898FP
CD DRIVER
TRACKING
FOCUS
SPINDLE
SLED
IC602 TA7291S
TRAY/MOTOR/DRIVER
M351 LOADING TRAY MOTOR
Q351~356 LOADING & ROTALY TRAY CONTROL
PR350 PROTECTOR 0.25A 491SERIES
Q101 2SC3052F SW
Q102 2SC3052F REG.
Q191 2SC2712 SW
DIGITAL OUT (OPTICAL)
LED191 SLZ-8128A-01-A
CN231 CONN.14P H FE
NC
I/OBUSY
O-SD
NC
O-CD LED
O-CLK
I-SD
I-SW
O-CLOSE
O-OPEN
O-DISH FWD
O-DISH-REV
I-DISH-SENS
VREF
TO MAIN UNIT
CN202 CONN.6P H FE
VM (+12V)
D-GND
CD ON
R CH
A-GND
L CH
Q901 DTC123JK LED DRIVER
VZROM MODEL
CN901 CONN ASSY 2P
LED901~903 FLASH WINDOW ILLUMINATION
LED C.B
LED903 SEL1250SM
LED901 SEL1250SM
LED902 SEL1550CM
DD 6V
VCD 5V
VCD GND
VCD 3.3V
Q301 2SA1357Y REG.
IC302 BA05FP REG.
IC303 BA033FP REG.
IC301 M5291FP DC-DC CONV (12V→6V)
Q302 DTA124XK CD +B SW
Q303 DTC124XK CD +B SW
SW351 SPPB61 OPEN
SW352 SPPB61 UP
S353 SPPB61 DOWN
Q1 KTA1266 LASER POWER CONTROL
Q2 2SC3052F T GAIN UP
Q3 2SC3052F F GAIN UP
Q4 2SC3052F RF GAIN UP
CON001 16P V TOC-B
CON2 CONN.6P V 2MM JMT
CN3 CONN.8P V FE
CD MECHANISM 3ZG-2 2NM
FOCUS
TRACKING
PICK UP ASSY KSS-213F
PD IC
LD
CD MOTOR C.B
SPINDLE MOTOR
SLED MOTOR
INSIDE LIMIT SW
T-T C.B
M401 DISH MOTOR (TURN TABLE MOTOR)
S401 CLOSE SW
PS401 GP1S53V
LED411 GL380
Q411 PT380F
SIGNAL
:ANALOG AUDIO (CD DATA)
:DIGITAL AUDIO
:WAVE FORM NO.

SCHEMATIC DIAGRAM-2 (VCD: 2/2)



VCD C.B (2/2)
TO VCD C.B (1/2)
IC502 74LV74APW 1/2 RFEQ. DIVIDER
IC503 SN74LVU04APW CLOCK OSC.
X501 27MHz
IC501 CL680-D1 MPEG-1 VIDEO & AUDIO DECODER
IC504 M5M4V16258B /5L D RAM
(MB81V4260S-60/70PFTN)
IC505 LH5V2RN1 ROM.
IC701 LC74781M OSD.
Q701, 704 VIDEO DRIVER
Q701 2SA1162GR
Q704 2SA1162GR
J701 JACK, PIN 1P
VIDEO OUT
Q601 2SC2712GR REG.
D/A CONV. IC601 SM5878AM
X601 16.9344MHz
D601 1SS184
Q602 DTA123JK MUTE SW
Q603 HN1C03FB MUTE
A-GND
L-CH
R-CH
IC201 µPD78016FGC 574-AB8 MICRO PROCESSOR
IC203 M51943BML RESET
Q205 DTA124XK SWITCH
Q202 DTC124XK SWITCH
D201 DA204K
VIDEO SW C.B
CON801
SW801
PAL
AUTO
NTSC
PAL AUTO
CN201 CONN.2P H 2MM
DACLK/16M
EXCK
SBSO
WFCK
SCOR
BCK
CD DATA
LRCK
C2PO
DA CLK
DD 6V
D-SD
VCD 5V
VCD GND
VCD 3.3V
I-SD
D-CLK
FSEQ
EMPH
DD
XCDRST
DATA
CE
CL
I/OBUSY
WRQ
FOK
SCOR
SIGNAL
ANALOG AUDIO (CD DATA)
DIGITAL AUDIO
VIDEO
CONTROL
WAVEFORM NO.

WIRING-3 (T-T/VIDEO SW/CD MOTOR)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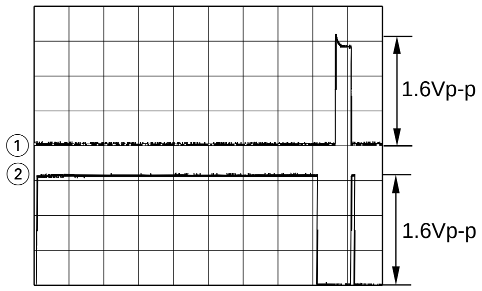
K
(CLOSE SW) S401
S401
R411
R412
C411
R413
PS401
R414
R415
Q411, LED411 (DISC DETECT SENSOR)
Q411
LED411
<BLK>
<RED>
M
M401 (DISH MOTOR)
TO VCD C.B CN3
CON8
T-T C.B
TO VCD C.B CN201
CON801
SW801
SW801 (TV MODE) PAL ←→ PAL AUTO ←→ NTSC
R802
R803
VIDEO SW C.B
TO VCD C.B CON 2
PIN3
M21 (SLED MOTOR)
M21
SW1
SW1 (INSIDE LIMIT SW)
M20
M20 (SPINDLE MOTOR)
CD MOTOR C.B

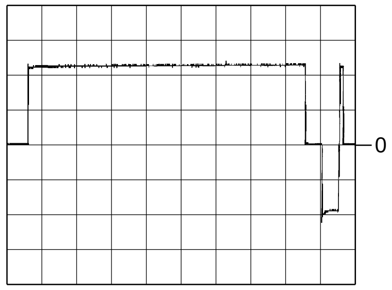
WAVE FORM

① CN231 ⑫ (O-DISH-REV) VOLT/DIV: 500mV
TIME/DIV: 200mS

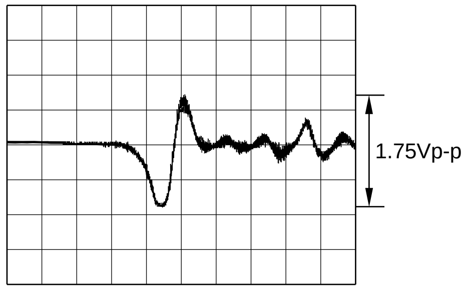
② CN231 ⑪ (O-DISH-FWD)



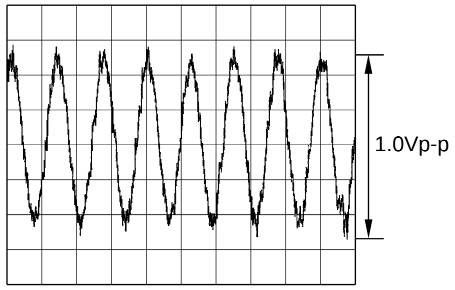
③ Between CN3 ⑦ and ⑧ VOLT/DIV: 1V
TIME/DIV: 200mS



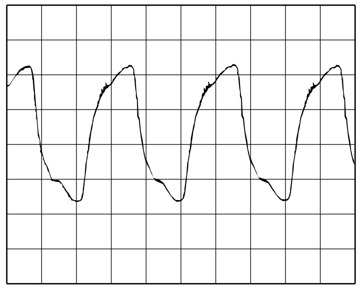
④ IC101 ⑮ (FE) VOLT/DIV: 500mV
TIME/DIV: 2mS



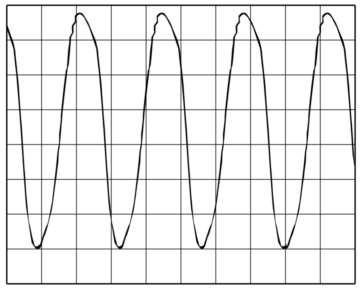
⑤ IC101 ⑯ (TE) VOLT/DIV: 200mV
TIME/DIV: 200μS



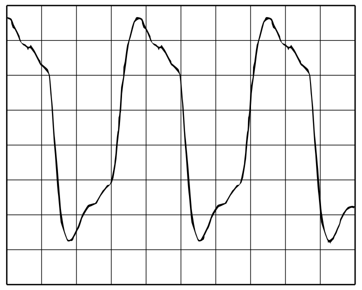
⑥ IC501 Pin (86) DA XCK VOLT/DIV: 1V
16.93MHz TIME/DIV: 20nS



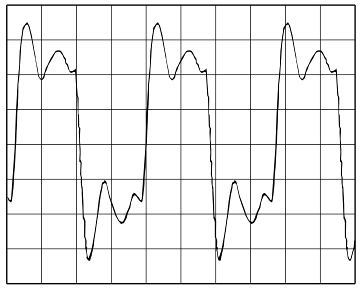
⑦ IC501 Pin (107) GCK OUT VOLT/DIV: 1V
42.3MHz TIME/DIV: 10nS



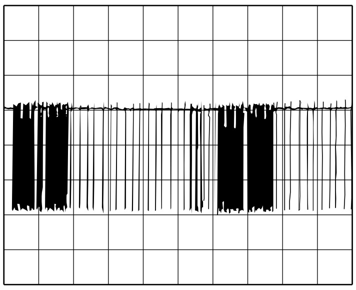
⑧ IC503 Pin ⑧ VCK VOLT/DIV: 1V
27MHz±1.35kHz TIME/DIV: 10nS



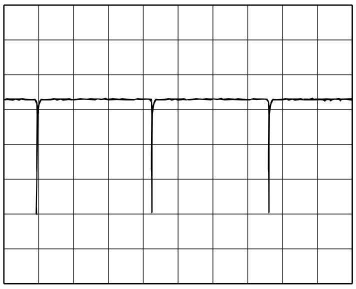
⑨ IC502 Pin ⑪ 2 CLK VOLT/DIV: 1V
13.5MHz±675Hz TIME/DIV: 20nS



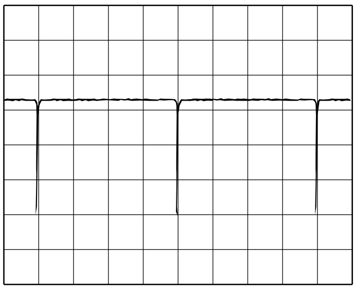
⑩ IC504 Pin ㉚ $\overline{\text{UCAS}}$ VOLT/DIV: 1V
(Pin ㉛ $\overline{\text{LCAS}}$) TIME/DIV: 2µS



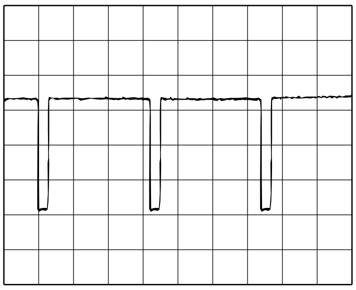
⑪ IC501 Pin (93) $\overline{\text{VSync}}$ VOLT/DIV: 1V
NTSC TIME/DIV: 5mS



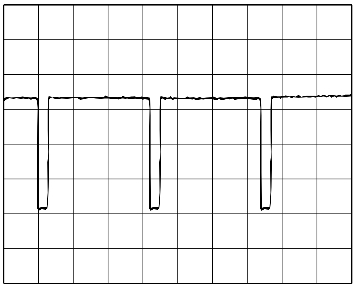
IC501 Pin (93) $\overline{\text{VSync}}$ VOLT/DIV: 1V
PAL TIME/DIV: 5mS



⑫ IC501 Pin (101) $\overline{\text{HSync}}$ VOLT/DIV: 1V
PAL TIME/DIV: 20µS



IC501 Pin (101) $\overline{\text{HSync}}$ VOLT/DIV: 1V
NTSC TIME/DIV: 20µS



IC DESCRIPTION

IC, CL680

Pin No.	Pin Name	I/O	Description
1	NC	—	No connection.
2	VSS	—	GND.
3	CD BCK	I	Bit clock input from CD DSP.
4	CD DATA	I	Data input from CD DSP.
5	CD LRCK	I	LRCK input from CD DSP.
6	CD C2PO	I	C2 pointer input from CD DSP.
7-9	NC	—	No connection.
10-15	MD0-MD5	I/O	DRAM/ROM interface. (DATA)
16	VSS	—	Ground.
17	MD6	I/O	DRAM/ROM interface. (DATA)
18	VDD3	—	Power supply 3.3V.
19	MD7	I/O	DRAM/ROM interface. (DATA)
20	VSS	—	Ground.
21	MD8	I/O	DRAM/ROM interface. (DATA)
22	VDD3	—	Power supply 3.3V.
23-29	MD9-MD15	I/O	DRAM/ROM interface. (DATA)
30-36	NC	—	No connection.
37	$\overline{\text{MCE}}$	—	ROM chip enable.
38	$\overline{\text{MWE}}$	O	DRAM write enable.
39	VSS	—	Ground.
40	$\overline{\text{CAS}}$	O	DRAM/ROM interface.
41	VDD3	—	Power supply 3.3V.
42	$\overline{\text{RASO}}$	O	DRAM/ROM interface.
43	$\overline{\text{RASI}}$	O	
44-46	MA10-MA8	O	DRAM/ROM interface. (Address)
47	VSS	—	Ground.
48	MA7	O	DRAM/ROM interface. (Address)
49	VDD3	—	Power supply 3.3V.
50-52	MA6-MA4	O	DRAM/ROM interface. (Address)
53	VSS	—	Ground.
54	MA3	O	DRAM/ROM interface. (Address)
55	VDD3	—	Power supply 3.3V.
56-58	MA2-MA0	O	DRAM/ROM interface. (Address)
59	PGIO7	I/O	Programmable I/O.
60	$\overline{\text{RESET}}$	I	Reset input.
61	VDD MAX IN	—	Power supply - VDDMAX. (5.0V)
62-64	NC	—	No connection.
65	AGND DAC	—	Analog ground.
66	A DAC	—	Analog power supply (DAC) : 3.3V.
67	COMP OUT	O	Composite out.
68	AGND DAC	—	Analog ground.

Pin No.	Pin Name	I/O	Description
69	Y OUT	O	Video signal “Y” OUT.
70	AVDD DAC	—	Analog power supply (DAC) 3.3V.
71	AGND DAC	—	Analog ground.
72	R REF	I	Reference resistor input.
73	V REF	I	Voltage reference input.
74	AVDD DAC	—	Analog power supply (DAC) : 3.3V.
75	C OUT	O	Video signal “C” out.
76	AGND DAC	—	Analog ground.
77-79	CLK SEL0-2	I	Clock selection input.
80	VSS	—	Ground.
81	CLK SEL3	I	Clock selection input.
82	VDD3	—	Power supply 3.3V.
83, 84	CLK SEL4, 5	I	Clock selection input.
85	AGND PLL	—	Analog ground.
86	DA XCK	I	DA XCK (16.933MHz) input.
87	AVDD PLL	—	Analog power supply 3.3V.
88	DA EMP	O	DAC-emphasis output.
89, 90	PGIO5, O6	I/O	Programmable I/O.
91	PGIO0	I/O	
92	PGIO8	I/O	
93	$\overline{\text{VSYNC}}$/$\overline{\text{CSYNC}}$	O	$\overline{\text{VSYNC}}$/$\overline{\text{CSYNC}}$ output.
94	AVDD PLL	—	Analog power supply (PLL) 3.3V.
95	VID_DAC_CK	O	Video DAC clock.
96	PROC_CK	O	Processor clock.
97	AUD_XCK	O	Audio XCK.
98	AGND PLL	—	Analog ground.
99	VSS	—	Ground.
100	NC	—	No connection.
101	$\overline{\text{HSYNC}}$	O	$\overline{\text{HSYNC}}$ output.
102	VDD3	—	Power supply 3.3V.
103	VCK OUT	O	VCK out.
104	VSS	—	Ground.
105	GCK	I	Global clock signal input. (42.3MHz)
106	VCK	I	Video clock signal input. (27.0MHz)
107	GCK OUT	O	Global clock signal output. (27.0MHz)
108	DA LRCK	O	DAC-LRCK output.
109	VDD MAX OUT	—	Power supply (VDD MAX) : 5.0V.
110	DA DATA	O	DAC-PCM data output.
111	DA BCK	O	DAC-BIT clock output.
112	HD OUT	O	Micon interface. (Data out)
113	HRDY	O	Micon interface. (Host ready)

Pin No.	Pin Name	I/O	Description
114	$\overline{\text{HINT}}$	O	Micon interface. (Host interrupt)
115	CDG SCK	I	CD-G serial clock input.
116	VSS	—	Ground.
117	HCK	I	Micon interface. (Host clock)
118	VDD3	—	Power supply 3.3V.
119	HD IN	I	Micon interface. (Host data in)
120	VDD3	—	Power supply 3.3V.
121	HSEL	I	Micon interface. (Host select in)
122	CDG DATA	I	CD-G data input.
123	CDG VFSY	I	CD-G VFSY input.
124	CDG SOSI	I	CD-G SOSI input.
125	DSP-XCK	O	DSP-XCK output.
126-128	NC	—	No connection.

IC, LC78635E

Pin No.	Pin Name	I/O	Description
1	PDO1	O	Internal VCO control phase comparator output pin. (Pull down)
2	PDO2	O	Internal VCO control phase comparator output pin. OFF for rough servo, ON for phase servo. (Pull down)
3	VVSS	—	Internal VCO ground pin.
4	PCKIST	I	PDO output current adjustment resistor connection pin.
5	VVDD	—	Internal VCO power supply pin.
6	FR	I	VCO frequency range adjustment resistor connection pin. (Pull up)
7	HFL	I	Mirror detection signal input pin.
8	SLCIST	I	SLCO output current adjustment resistor connection pin.
9	SLCO	O	Control output.
10	EFMIN	I	EFM signal input pin.
11	JITTV	O	Jitter detection monitor pin.
12	JITTC	O	Jitter detection adjustment pin. (Pull down)
13	BH	I	BH signal input pin. (Connected to GND)
14	PH (RFENV)	I	PH signal or RFENV signal input pin.
15	FE	I	FE signal input pin.
16	TE	I	TE signal input pin.
17	VREF	I	VREF input pin.
18	ADAVDD	—	Servo A/D, D/A power supply pin.
19	ADAVSS	—	Servo A/D, D/A ground pin.
20	PHREF	O	PH reference output pin.
21	BHREF	O	BH reference output pin.
22	TBLO	O	Tracking balance output pin.
23	TDO	O	Tracking control output pin.
24	FDO	O	Focus control output pin.
25	SPDO	O	Spindle control output pin.
26	SLDO	O	Thread control output pin.
27	FG	I/O	FG signal input pin. (Connected to GND)
28	LASER	O	Laser ON/OFF control pin.
29	CONT1	I/O	General-purpose input/output pin 1. (Connected to GND)
30	CONT2	I/O	General-purpose input/output pin 2. (Connected to GND)
31	CONT3	I/O	General-purpose input/output pin 3.
32	CONT4	I/O	General-purpose input/output pin 4.
33	CONT5	I/O	General-purpose input/output pin 5. (Not connected)
34	PCK	O	EFM data playback clock monitor pin. Average 4.3218MHz when the phase is locked. (Not connected)
35	C2F	O	C2 flag output pin.
36	VDD	—	Digital power supply pin.
37	DOUT	O	Digital out output pin. (EIAJ format)
38	FSX	O	Output pin for the 7.35kHz synchronization signal divided from the crystal oscillator. (Not connected)

Pin No.	Pin Name	I/O	Description
39	EFLG	O	C1, C2 error correction monitor pin. (Not connected)
40	TEST	I	Test input pin. (Connected to GND)
41	EMPH	I/O	Emphasis pin. Which becomes an input pin after reset and can be controlled externally. This becomes an emphasis monitor pin under control by command.
42	MUTEL	O	L channel mute output pin. (Not connected)
43	MUTER	O	R channel mute output pin. (Not connected)
44	LVDD	—	L channel power supply pin.
45	LCHO	O	L channel output pin. (Not connected)
46	LVSS	—	L channel ground pin.
47	RVSS	—	R channel ground pin.
48	RCHO	O	R channel output pin. (Not connected)
49	RVDD	—	R channel power supply pin.
50	XVDD	—	Crystal oscillator power supply pin.
51	XIN	I	Connections for a 16.9344MHz crystal oscillator pin.
52	XOUT	O	
53	XVSS	—	Crystal oscillator ground pin.
54	ASLRCK	I	L/R clock input pin. (Connected to GND)
55	ASDACK	I	Bit clock input pin. (Connected to GND)
56	ASDFIN	I	L/R channel data input pin. (Connected to GND)
57	LRSY	O	L/R clock output pin.
58	DATACK	O	Bit clock output pin.
59	DATA	O	L/R channel data output pin.
60	16M	O	16.9344MHz output pin.
61	SFSY	O	Subcode frame synchronization signal output pin. This signal falls when the subcode is in the standby state.
62	SBSY	O	Subcode clock synchronization signal output pin.
63	PW	O	Subcode P, Q, R, S, T, U and W output pin.
64	SBCK	I	Subcode readout clock input pin.
65	CE	I	Chip enable signal input pin.
66	CL	I	Data transfer clock input pin.
67	DI	I	Data input pin.
68	DO	O	Data output pin.
69	INT	O	Interruption signal output pin. (Not connected)
70	WRQ	O	Interruption signal output pin.
71	RES	I	Reset input pin. This pin must be set low briefly after power is first applied.
72	DRF	O	Focus ON detect pin.
73	VDD5V	—	Microprocessor interface power supply.
74	VSS	—	Digital ground pin.
75	CONT6	I/O	General-purpose input/output pin 6.
76	CONT7	I/O	General-purpose input/output pin 7.
77	V/P	O	Rough servo/phase control automatic switching monitor output pin. “H” for rough servo and “L” for phase servo. (Not connected)

Pin No.	Pin Name	I/O	Description
78	FSEQ	O	Synchronization signal detection output pin. Outputs a high level when the synchronization signal detected from the EFM signal and the internally generated synchronization signal agree.
79	DEFECT	I/O	Defect pin. Which becomes an input pin after reset and can be controlled externally. This becomes the defect monitor pin under control by command. (Not connected)
80	EFMO	O	EFM signal output pin. (Not connected)

IC, LC74781M

Pin No.	Pin Name	I/O	Description
1	VSS1	—	GND connection terminal. (Digital ground terminal).
2	Xtal IN	I	External X’tal and capacitor for internal sync generator, or the external clock are connected to this terminal. (2fsc or 4fsc).
3	Xtal OUT	O	
4	CTRL1	I	Either the external clock input mode or the X’tal generator mode is selected by this selector terminal. L: X’tal generator mode, H: External clock input.
5	BLANK	O	Blank signal (character and the green ORed signal) is output from this terminal. (MODE 0: composite sync signal is output at H.) When reset ($\overline{\text{RST}}$ terminal = L), the X’tal clock signal is output. (It is not output when reset by the reset command).
6	OSC IN	I	External coil and capacitor for the character output dot clock generator are connected to this terminal.
7	OSC OUT	O	
8	CHARA	O	The character signal is output from this terminal. (MOD 0: when H, the external sync signal identification signal is output from this terminal. This output signal tells whether the external sync signal is present or not. When external sync signal is present, H is output.) When reset ($\overline{\text{RST}}$ terminal = L), the dot clock signal (LC oscillator) is output. (It is not output when reset by the reset command).
9	$\overline{\text{CS}}$	I	Enable signal for the serial data input is input to this terminal. The serial data input is enabled at L. Pull-up resistor is built-in. (Hysteresis input).
10	SCLK	I	Clock of the serial data input is input to this terminal. Pull-up resistor is built-in. (Hysteresis input).
11	SIN	I	Serial data input terminal. Pull-up resistor is built-in. (Hysteresis input).
12	VDD2	—	Power supply for the composite video signal level adjustment. (Analog power supply).
13	CV OUT	O	Composite video signal output terminal.
14	NC	—	Connected to GND or not connected.
15	CV IN	I	Composite video signal input terminal.
16	VDD1	—	Power supply (+5V digital power supply).
17	SYN IN	I	Video signal for the internal sync separator circuit is input to this terminal. (When the internal sync separator circuit is not used, the horizontal sync signal or composite sync signal is input to this terminal).
18	SEP C	—	Internal sync separator circuit bias voltage monitoring terminal.
19	SEP OUT	O	The composite sync output signal of the internal sync separator circuit is output from this terminal. (H: MOD 1. H: during internal sync mode. L: during external sync mode.) (When internal sync separator circuit is not used, the SYN IN input signal is output from this terminal).
20	SEP IN	I	The output signal of the SEP OUT terminal is integrated so that the vertical sync signal is input to this terminal. An integrator circuit must be connected between the SEP OUT terminal and this terminal. When this terminal is not used, it must be connected to VDD1.
21	CTRL2	I	When selecting any of the NTSC or PAL or PAL-M or PAL-N system, the pin setting has priority. When L, the NTSC system is selected after resetting. Selection of either NTSC or PAL or PAL-M or PAL-N system by the command becomes effective. H: PAL-M system.

Pin No.	Pin Name	I/O	Description
22	CTRL3	I	Controls whether or not to input the $\overline{\text{VSYNC}}$ signal to the SEPIN input. L: to input the $\overline{\text{VSYNC}}$ signal. H: not to input the $\overline{\text{VSYNC}}$ signal.
23	$\overline{\text{RST}}$	I	System reset input terminal. Pull-up resistor is built-in. (Hysteresis input).
24	VDD1	—	Power supply. (+5V digital power supply).

IC, µPD78016FGC

Pin No.	Pin Name	I/O	Description
1	RBPLS	O	RADIAL BALANCE PLUS.
2	AMUTE	O	AUDIO ANALOG MUTE (H=MUTE ON).
3	GFS	I	GFS.
4	XVCDMD	I	AUDIO/VIDEO CD MODE (L=VCD=SPINDLE GAIN UP).
5	MD2	O	DOUT MUTE CONT.
6	EMPH	I	EMPHASIS.
7	SQSO	I	SQDATA FROM CD.
8	SQCK	O	SQCLK TO CD.
9	VSS	—	GND.
10	SWNT	I	SW TV OUT MODE (L=NTSC).
11	SWAUTO	I	SW TV OUT MODE (L=NTSC/PAL AUTO).
12	SWPAL	I	SW TV OUT MODE (L=PAL).
13	EMERG	I	POWER EMERGENCY STOP (L*3sec=STOP).
14	NC	—	Nou used.
15	LPCSEL	I	“LPC ON/OFF (H=ON, NORMAL)”.
16	NC	—	Nou used.
17	LOCK	O	GFS (FRAME SYNC) LOCK (NO USE=H).
18	DMUTE	O	DIGITAL DATA OUT MUTE.
19	SENS	I	DSP SENS1 FROM CD.
20	XCDRST	O	CD RESET.
21	DATA	O	DATA TO CD.
22	XLAT	O	XLT TO CD.
23	CLOK	O	CLK TO CD.
24	VSS	—	GND.
25	FOK	I	FOCUS OK.
26	SENS2	I	SSP SENS2 FROM CD.
27	XBUSY	I/O	READY/BUSY I/O TO HOST OD.
28	NC	—	Nou used.
29	NC	—	
30	NC	—	
31	TST0	I/O	CHECK LAND.
32	TST1	I/O	
33	TST2	I/O	
34	TST3	I/O	
35	RESET	I	RESET.
36	HRDY	I	HRDY FROM CL680.
37	XHINT	I	HINT FROM CL680.
38	NC	—	Nou used.
39	SCOR	I	SCOR FROM CD.
40	VDD	—	5.0VDD.
41	XO	O	8.0MHz CERALOCK.

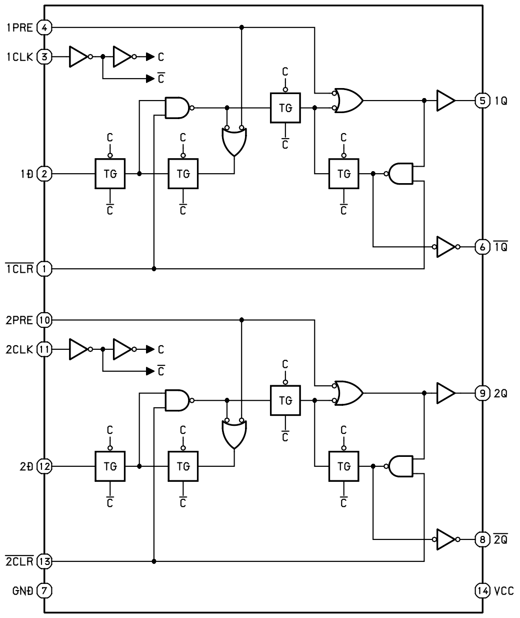
Pin No.	Pin Name	I/O	Description
42	XI	I	8.0MHz CERALOCK.
43	VSS	—	GND.
44	XT2	—	Nou used.
45	XT1	I	5.0VDD.
46	AVSS	—	GND.
47	XMPGRST	O	MPEG BLOCK IC RESET.
48	HSEL	O	ADDRESS/DATA SEL TO CL680.
49	INLSW	I	INSIDE LIMIT SW.
50	NC	—	Nou used.
51	OSDXCS	O	OSD CHIP SELECT.
52	ABSEL	I	CXA1992A/B SELECT (L=CXA1992A).
53	CLVSEL	I	CLV MODE SELECT (H=CLV-N).
54	AADSEL	I	AUTO ADJUST SELECT (H=AUTO ON).
55	AVDD	—	5.0VDD.
56	AVREF	—	
57	HDOUT	I	HD-OUT FROM CL680.
58	HDIN	O	HD-IN TO CL680.
59	HCK	O	HCK TO CL680.
60	OSDDATA	O	OSD DATA.
61	OSDCLK	O	OSD CLOCK.
62	COMMAND	I	COMMAND FROM HOST.
63	STATUS	O	STATUS TO HOST.
64	SCK	I	SCK FROM HOST.

IC, SM5878M

Pin No.	Pin Name	I/O	Description
1	MUTE	I	MODE = H: Soft mute ON/OFF terminal. (Mute at H). MODE = L: Attenuator level DOWN/UP terminal. (DOWN at H).
2	DEEM	I	De-emphasis ON/OFF terminal. (De-emphasis ON at H).
3	CKO	O	Oscillator clock output. (16.9344 MHz).
4	DVSS	—	Digital VSS terminal.
5	BCKI	I	Bit clock input terminal.
6	DI	I	Serial data input terminal.
7	DVDD	—	Digital VDD terminal.
8	LRCI	I	Sample rate clock (fs) input terminal. (H = L ch/L = R ch).
9	TSTN	I	Test input. (“H” or open during normal operation)
10	TO1	O	Test output 1. (Normally low level output).
11	AVDDL	—	Analog VDD terminal. (For L ch).
12	LO	O	Left channel analog output terminal.
13	AVSS	—	Analog VSS terminal.
14	RO	O	Right channel analog output terminal.
15	AVDDR	—	Analog VDD terminal. (For R ch).
16	MUTEO	O	Infinity zero detection output.
17	XVDD	—	X’tal system VDD terminal.
18	XTI	I	X’tal oscillator terminal. (Or external clock input terminal of 16.9344 MHz).
19	XTO	O	X’tal oscillator terminal.
20	XVSS	—	X’tal system VSS terminal.
21	DS	I	Double-speed/normal playback selection. (Double-speed at H).
22	RSTN	I	Reset terminal. (Reset at L).
23	MODE	I	Soft mute/Attenuator mode selection. (Soft mute at H).
24	ATCK	I	Attenuator level setup clock (Ignored when MODE = H).

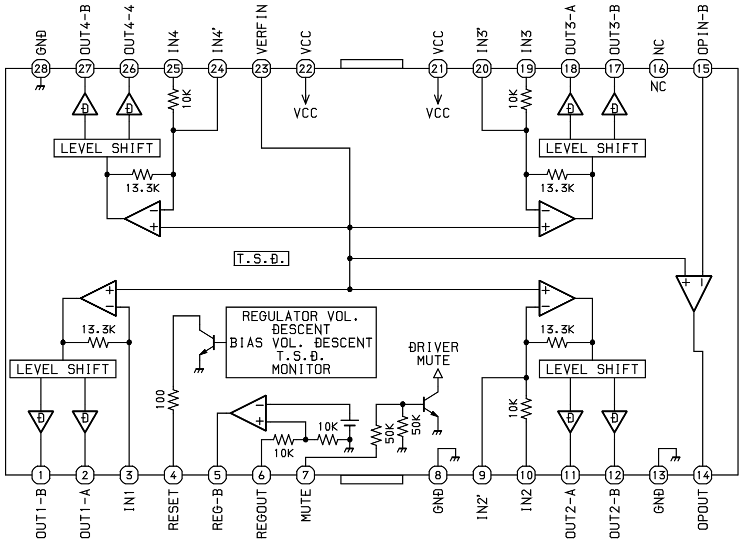
IC BLOCK DIAGRAM

IC, SN74LV74APW



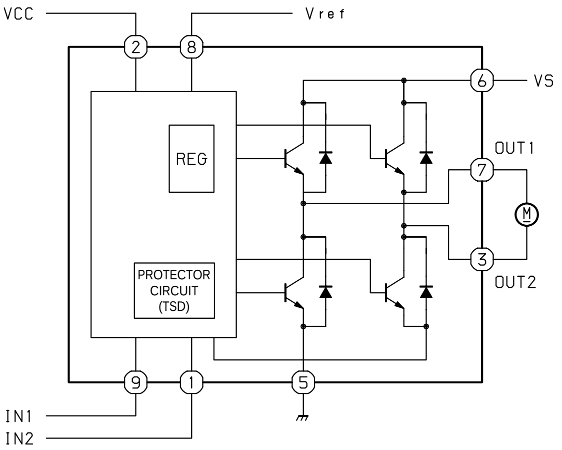
1PRE 4
1CLK 3
1D 2
1CLR 1
2PRE 10
2CLK 11
2D 12
2CLR 13
GND 7
TG
C
C̄
5 1Q
6 1Q̄
9 2Q
8 2Q̄
14 VCC

IC, BA6998FP



28 GND
27 OUT4-B
26 OUT4-4
25 IN4
24 IN4'
23 VERFIN
22 VCC
21 VCC
20 IN3'
19 IN3
18 OUT3-A
17 OUT3-B
16 NC
15 OPIN-B
NC
VCC
VCC
10K
10K
LEVEL SHIFT
LEVEL SHIFT
13.3K
13.3K
T.S.D.
13.3K
13.3K
REGULATOR VOL. DESCENT
BIAS VOL. DESCENT
T.S.D.
MONITOR
DRIVER MUTE
LEVEL SHIFT
LEVEL SHIFT
100
10K
10K
10K
50K
50K
1 OUT1-B
2 OUT1-A
3 IN1
4 RESET
5 REG-B
6 REGOUT
7 MUTE
8 GND
9 IN2'
10 IN2
11 OUT2-A
12 OUT2-B
13 GND
14 OPOUT

IC, TA7291S



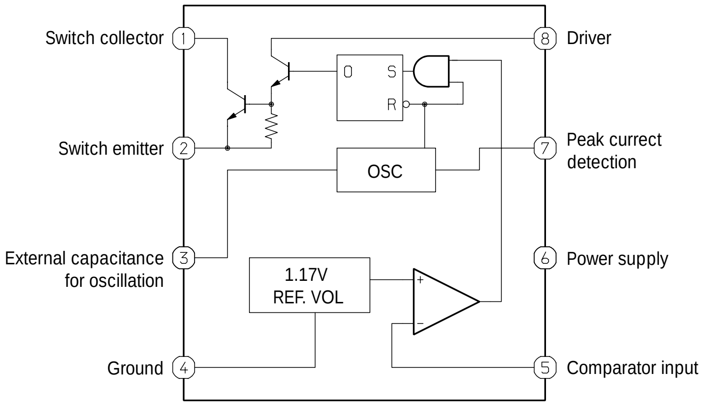
VCC
Vref
2
8
6 VS
7 OUT1
M
3 OUT2
REG
PROTECTOR CIRCUIT (TSD)
9
1
5
IN1
IN2

INPUT		OUTPUT		MODE
IN1	IN2	OUT1	OUT2	
0	0	∞	∞	STOP
1	0	H	L	CW/CCW
0	1	L	H	CCW/CW
1	1	L	L	BRAKE

∞ : HI IMPEDANCE

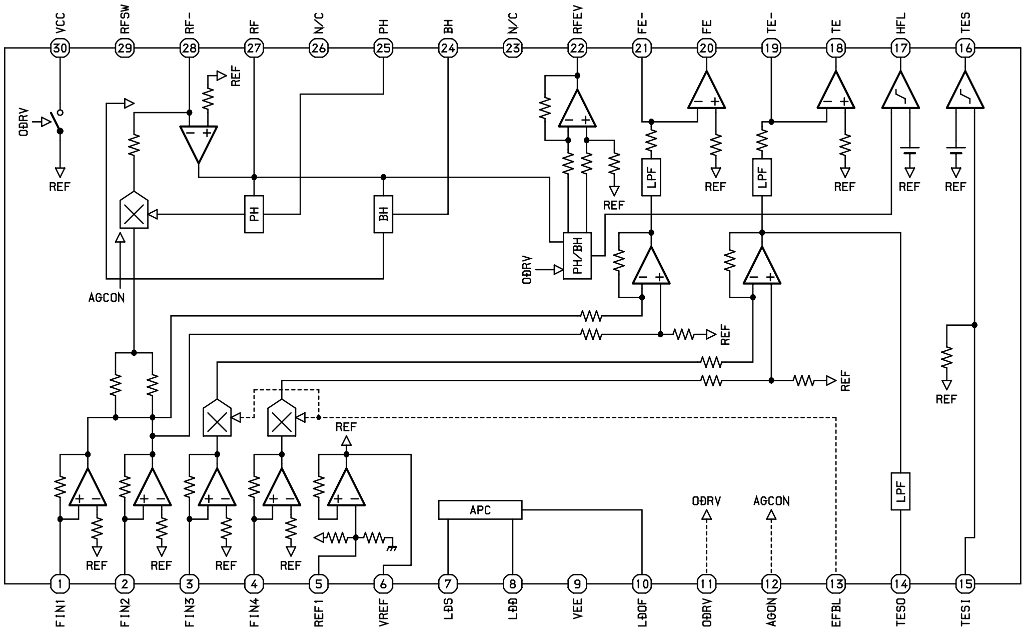
NOTE : INPUT “H” ACTIVE

IC, M5291FP



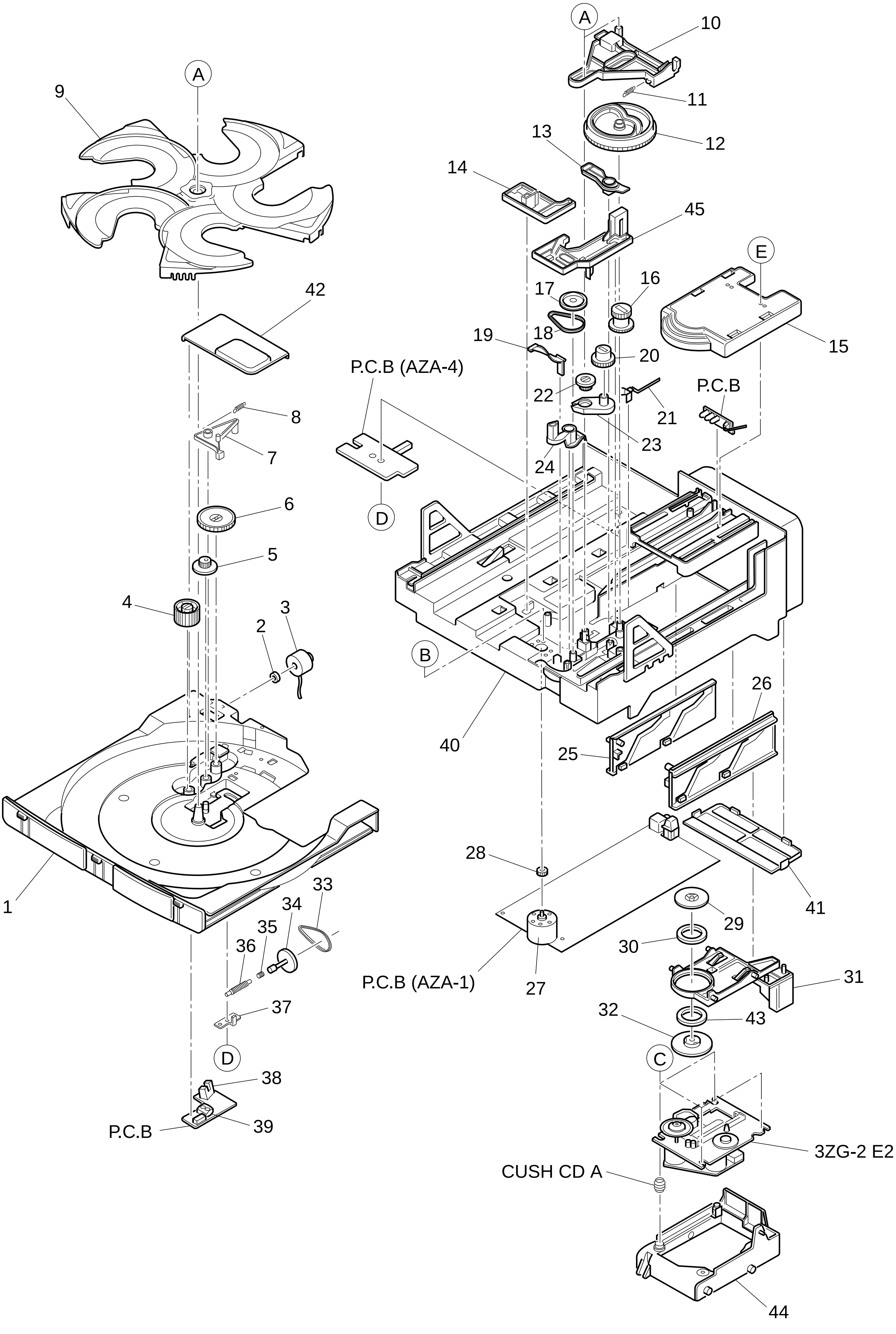
Switch collector 1
Switch emitter 2
External capacitance for oscillation 3
Ground 4
8 Driver
7 Peak currect detection
6 Power supply
5 Comparator input
Q
S
R
OSC
1.17V REF. VOL
+
-

IC, LA9235M



30 VCC
29 RFSW
28 RF-
27 RF
26 N/C
25 PH
24 BH
23 N/C
22 RFEV
21 FE-
20 FE
19 TE-
18 TE
17 HFL
16 TES
ODRV
REF
AGCON
PH
BH
PH/BH
ODRV
LPF
LPF
LPF
APC
ODRV
AGCON
1 FIN1
2 FIN2
3 FIN3
4 FIN4
5 REF1
6 VREF
7 LDS
8 LDD
9 VEE
10 LDOF
11 ODRV
12 AGCON
13 EFBL
14 TESO
15 TESI

MECHANICAL EXPLODED VIEW 1/1


A
9
42
8
7
6
5
4
3
2
1
33
34
35
36
37
D
38
P.C.B
39
A
10
11
12
13
14
45
E
16
17
18
19
15
20
P.C.B (AZA-4)
22
21
P.C.B
23
24
D
B
40
26
25
28
41
29
30
P.C.B (AZA-1)
27
31
32
43
C
3ZG-2 E2
CUSH CD A
44

MECHANICAL PARTS LIST 1/1

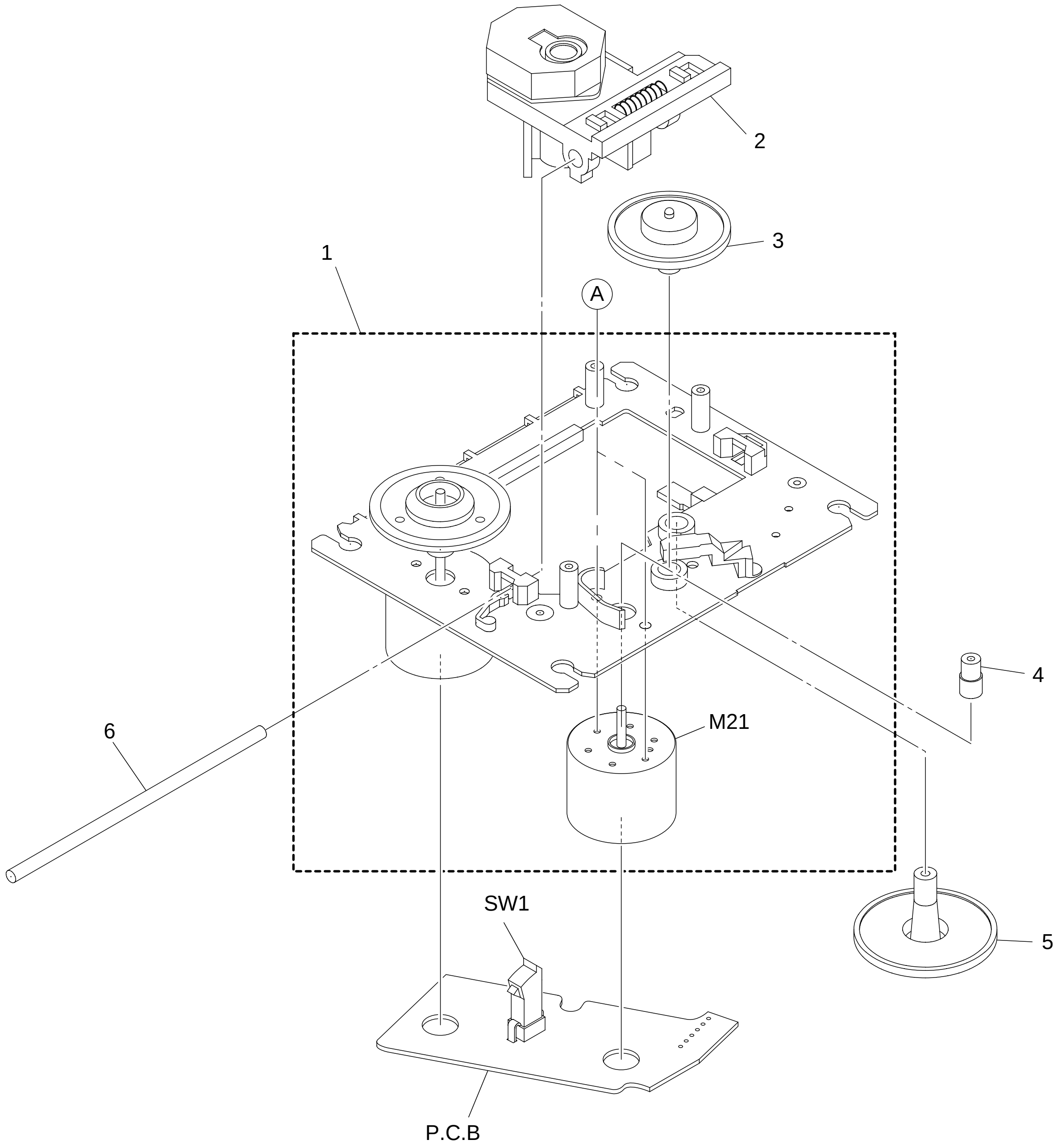
DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO	PART NO.	KANRI NO.	DESCRIPTION	REF. NO	PART NO.	KANRI NO.	DESCRIPTION
1	86-ZG1-001-410		TRAY,5CD	26	86-ZG1-210-110		SLIDER,CAM R(*)
2	84-ZG1-267-010		PULLEY,LOAD MO 8	27	87-045-305-010		MOTOR, RF-500TB DC-5V (2MA)
3	87-A90-036-010		MOT ASSY,RF-300CA-11	28	84-ZG2-228-010		PULLEY,MOT
4	86-ZG1-228-110		GEAR,TT-B	29	83-ZG3-211-010		PLATE,DISC
5	86-ZG1-227-110		GEAR,TT-A	30	83-ZG3-604-010		RING,MAG 2
6	86-ZG1-223-110		GEAR,WORM-WHEEL TT	31	86-ZG1-215-010		HLDR,CHUCK
7	86-ZG1-224-110		LEVER,TT(*)	32	86-ZG1-238-010		HLDR,MAGNET 6ZG N
8	86-ZG1-226-010		SPR-E,LEVER TT	33	86-ZG1-225-010		BELT,SQ1.2-32.9
9	86-ZG1-002-210		TURN TABLE,5CD	34	86-ZG1-221-010		PULLEY,TT
10	86-ZG1-211-210		JOINT,CAM	35	86-ZG1-231-010		SPR-C,WORM
11	86-ZG1-216-010		SPR-E,JT	36	84-ZG1-256-010		GEAR,WORM N2
12	86-ZG1-203-210		GEAR,MAIN CAM	37	86-ZG1-232-010		SPR-P,WORM
13	86-ZG1-213-110		LEVER,LOAD	38	86-ZG1-229-010		HLDR,SENSOR
14	86-ZG1-214-110		LEVER,PROTECT	39	86-ZG1-230-010		HLDR,DISC SENSOR
15	86-ZG1-004-010		REFLECTOR,CD<VZRDM>	40	86-ZG1-201-310		CHAS,MECHA
16	86-ZG1-205-110		GEAR,TRAY	41	86-ZG1-005-110		COVER,CHAS
17	84-ZG1-207-010		PULLEY,RELAY	42	86-ZG1-003-110		COVER,TRAY<VZRDM>
18	84-ZG1-209-010		BELT,SQ1.8-117.7	43	86-ZG1-239-110		PLATE,DISC
19	86-ZG1-217-010		LEVER,SW	44	86-ZG1-202-210		HLDR,MECHA
20	86-ZG1-206-110		GEAR,RELAY B	45	86-ZG1-212-410		SLIDER,LOAD
21	86-ZG1-220-110		SPR-P,LOCK	A	87-078-148-010		VFT2+3-12(F10) BLK
22	86-ZG1-204-110		GEAR,RELAY A	B	87-251-072-410		U+2.6-5
23	86-ZG1-218-110		PLATE,GEAR	C	81-ZG1-254-010		S-SCREW,MECH HLDR
24	86-ZG1-208-010		LEVER,TRAY	D	87-067-579-010		TAPPING SCREW, BVT2+3-8
25	86-ZG1-209-110		SLIDER,CAM L(*)	E	87-067-703-010		TAPPING SCREW, BVT2+3-10<VZRDM>

COLOR NAME TABLE

Basic color symbol	Color	Basic color symbol	Color	Basic color symbol	Color
B	Black	C	Cream	D	Orange
G	Green	H	Gray	L	Blue
LT	Transparent Blue	N	Gold	P	Pink
R	Red	S	Silver	ST	Titan Silver
T	Brown	V	Violet	W	White
WT	Transparent White	Y	Yellow	YT	Transparent Yellow
LM	Metallic Blue	LL	Light Blue	GT	Transparent Green
LD	Dark Blue	DT	Transparent Orange	GM	Metallic Green
YM	Metallic Yellow	DM	Metallic Orange	PT	Transparent Pink

CD MECHANISM EXPLODED VIEW 1/1 (3ZG-2E2)



CD MECHANISM PARTS LIST 1/1 (3ZG-2E2)

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
1	83-ZG2-261-010		CHAS ASSY,E2
2	87-A90-836-010		PICKUP,KSS-213F
3	83-ZG2-235-010		GEAR,A3
4	83-ZG2-236-010		GEAR,MOTOR 3
5	83-ZG2-205-310		GEAR,B
6	83-ZG2-253-010		SHAFT,SLIDE 5
A	87-261-032-210		V+2-3

REFERENCE NAME LIST

ELECTRICAL SECTION

DESCRIPTION	REFERENCE NAME
ANT	ANTENNAS
C-	CHIP
C-CAP	CAP, CHIP
C-CAP TN	CAP, CHIP TANTALUM
C-COIL	COIL, CHIP
C-DI	DIODE, CHIP
C-DIODE	DIODE, CHIP
C-FET	FET, CHIP
C-FOTR	FILTER, CHIP
C-JACK	JACK, CHIP
C-LED	LED, CHIP
C-RES	RES, CHIP
C-SFR	SFR, CHIP
C-SLIDE SW	SLIDE SWITCH, CHIP
C-SW	SWITCH, CHIP
C-TR	TRANSISTOR, CHIP
C-VR	VOLUME, CHIP
C-ZENER	ZENER, CHIP
CAP, CER	CAP, CERA-SOL
CAP, E	CAP, ELECT
CAP, M/F	CAP, FILM
CAP, TC	CAP, CERA-SOL
CAP, TC-U	CAP, CERA-SOL SS
CAP, TN	CAP, TANTALUM
CERA FIL	FILTER, CERAMIC
CF	FILTER, CERAMIC
DL	DELAY LINE
E/CAP	CAP, ELECT
FILT	FILTER
FLTR	FILTER
FUSE RES	RES, FUSE
MOT	MOTOR
P-DIODE	PHOTO DIODE
P-SNSR	PHOTO SENSER
P-TR	PHOTO TRANSISTOR
POLY VARI	VARIABLE CAPACITOR
PPCAP	CAP, PP
PT	POWER TRANSFORMER
PTR, RES	PTR, MELF
RC	REMOTE CONTROLLER
RES NF	RES, NON-FLAMMABLE
RESO	RESONATOR
SHLD	SHIELD
SOL	SOLENOID
SPKR	SPEAKER
SW, LVR	SWITCH, LEVER
SW, RTRY	SWITCH, ROTARY
SW, SL	SWITCH, SLIDE
TC CAP	CAP, CERA-SOL
THMS	THERMISTOR
TR	TRANSISTOR
TRIMMER	CAP, TRIMMER
TUN-CAP	VARIABLE CAPACITOR
VIB, CER	RESONATOR, CERAMIC
VIB, XTAL	RESONATOR, CRYSTAL
VR	VOLUME
ZENER	DIODE, ZENER

MECHANICAL SECTION

DESCRIPTION	REFERENCE NAME
ADHESHIVE	SHEET ADHESHIVE
AZ	AZIMUTH
BAR-ANT	BAR-ANTENNA
BAT	BATTERY
BATT	BATTERY
BRG	BEARING
BTN	BUTTON
CAB	CABINET
CASS	CASSETTE
CHAS	CHASSIS
CLR	COLLAR
CONT	CONTROL
CRSR	CURSOR
CU	CUSHION
CUSH	CUSHION
DIR	DIRECTION
DUBB	DUBBING
FL	FRONT LOADING
FLY-WHL	FLYWHEEL
FR	FRONT
FUN	FUNCTION
G-CU	G-CUSHION
HDL	HANDOL
HIMERON	CLOTH
HINGE, BAT	HINGE, BATTERY
HLDR	HOLDER
HT-SINK	HEAT SINK
IB	INSTRUCTION BOOKLET
IDLE	IDLER
IND, L-R	INDICATOR, L-R
KEY, CONT	KEY, CONTROL
KEY, PRGM	KEY, PROGRAM
KNOB, SL	KNOB, SLIDE
LBL	LABEL
LID, BATT	LID, BATTERY
LID, CASS	LID, CASSETTE
LVR	LEVER
P-SP	P-SPRING
PANEL, CONT	PANEL, CONTROL
PANEL, FR	PANEL, FRONT
PRGM	PROGRAM
PULLY, LOAD MO	PULLY, LOAD MOTOR
RBN	RIBBON
S-	SPECIAL
SEG	SEGMENT
SH	SHEET
SHLD-SH	SHIELD-SHEET
SL	SLIDE
SP	SPRING
SP-SCREW	SPECIAL-SCREW
SPACER, BAT	SPACER, BATTERY
SPR	SPRING
SPR-P	P-SPRING
SPR-PC-PUSH	P-SPRING, C-PUSH
T-SP	T-SPRING
TERM	TERMINAL
TRIG	TRIGGER
TUN	TUNING
VOL	VOLUME
W	WASHER
WHL	WHEEL
WORM-WHL	WORM-WHEEL

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